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Catalog Of First Motion Focal Mechanisms

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by

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This report is preliminary and has not been edited or reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

VOLUME 2

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ABSTRACT :

Beginning 1 January 1981, first motion focal mechanisms for large earthquakes were computed on a routine basis and reported in the *U.S.G.S Preliminary Determination of Epicenters Monthly Listing* (PDE Monthly Listing).

Between 1 January 1981 and 1 August 1982, an attempt was made to compute these first motion focal mechanisms routinely for earthquakes that had a magnitude equal to or greater than 6.5.

After 1 August 1982, the magnitude criterion was lowered to m_b magnitude equal to or greater than 5.8. However for earthquakes with a depth greater than 70 km, the magnitude criterion was m_b equal to or greater than 5.7.

The magnitudes and depths used to select the earthquakes are taken from the *U.S.G.S Preliminary Determination of Epicenters listing* (PDE)

A total of 241 focal mechanisms computed for the time period of 1981 through 1983 were reported in the *Catalog of First Motion Focal Mechanisms, 1981-1983* (Needham, 1986). A total of 227 focal mechanisms computed for the years of 1984 and 1985 are presented in this catalog.

To simplify the use of this catalog, it is being presented in three volumes. These volumes are divided into broad geographic areas to equalize the size of each volume and without particular regard for any tectonic regionalization. Volume 1 encompasses the geographic areas of North America, East-central Pacific Ocean, Middle America, South America, Atlantic Ocean , and Southeastern Europe. Volume 2 presents data for the geographic areas of continental Asia, Indian Ocean and the eastern Asian islands from the Northern Philippine Islands to Kamchatka. Volume 3 encompasses the islands of the south and southwestern Pacific Ocean, including Indonesia and the southern Philippine islands.

The geographic areas for volumes 1, 2, and 3 are divided into 20 geographic subdivisions. The boundaries of these subdivisions are determined by the earthquake locations which could be coherently presented on a map rather than by any particular tectonic boundaries. Volume 1 is divided into 8 of these geographic subdivisions. Volume 2 is divided into 6 of these subdivisions and volume 3 into 6.

The contents of each volume of this catalog are presented in the following order:

- (1) A Mollweide map projection of the world in which the areas encompassed by each volume is outlined.
- (2) A Mollweide map projection of the world in which the geographic subdivisions of the areas covered by each volume are outlined.
- (3) A chronological listing, for each of the geographic subdivisions, of hypocenter parameters for earthquakes reported in this catalog including event numbers that will be used throughout this catalog.
- (4) A chronological listing, for each of the geographic subdivisions, of hypocenter parameters of earthquakes which met the magnitude criteria on the Monthly Listing but are not reported in this catalog.
- (5) A table showing the station code abbreviations and locations of the seismograph stations used in this catalog.
- (6) An equal area projection map for each of the geographic subdivisions with lower hemisphere focal sphere projections associated to each event by event number.

- (7) A table of focal mechanism parameters, listed by event number, for each of the geographic subdivisions.
- (8) Lower hemisphere focal sphere projections for each event including the first motions used for the focal mechanism to compute the focal mechanism for each event.
- (9) Individual seismograph station data used to compute the focal mechanism for each event.

INTRODUCTION (VOLUME 2):

This is the second of a 3 volume set that presents the first motion focal mechanisms computed by the U.S. Geological Survey for earthquakes occurring in the time period 1 January 1984 through 31 December 1985. The geographic areas encompassed by this volume include Eastern Asia, Ryukyu and Bonin Islands Areas, Northern Philippine Islands and Southwest Indian Ocean (Figure 27). The geographic area of volume 2 was divided into 6 smaller subdivisions: (9) Kamchatka-Kuril Islands, (10) Japan, (11) Bonin-Mariana-Caroline Islands, (12) Ryukyu-Taiwan-Northern Philippine Islands, (13) Central Asia, and (14) Southwestern Indian Ocean. The boundaries of these subdivisions are determined by the earthquake locations which could be coherently presented on a map rather than by any tectonic boundaries. These subdivisions are presented on figure 28 and as azimuthal equidistant projections, in figures 29, 34, 39, 43, 47, and 51, with the earthquake hypocenters and focal mechanisms also plotted. The symbol \times denotes hypocenters with shallow depths (0-70 km), + intermediate depths (71-300 km), and \diamond deep depths (301-700km). Table 66 shows the map name, latitude and longitude of the map center, and the radius for each azimuthal equidistant projection.

Table 66. Azimuthal equidistant projections coordinates
and map radius for Volume 2.

MAP NAME	LATITUDE OF CENTER (DEGREES)	LONGITUDE OF CENTER (DEGREES)	RADIUS OF MAP (DEGREES)
KAMCHATKA-KURIL IS.	50.0 N	156.0 E	10
JAPAN	38.0 N	135.0 E	10
BONIN-MARIANA-CAROLINE ISLES.	20.0 N	140.0 E	20
RYUKYU-TAIWAN-N. P.I.	24.0 N	121.0 E	15
CENTRAL ASIA	35.0 N	75.0 E	25
SOUTHWEST INDIAN OCEAN	30.0 S	60.0 E	30

The Flinn-Engdahl region numbers, *Flinn and Engdahl (1965)*, associated to the earthquakes within the confines of these azimuthal equidistant projections are shown in table 67.

Table 67. Flinn-Engdahl region numbers for earthquakes within Volume 2 geographic subdivisions.

GEOGRAPHIC SUBDIVISION	REGION NUMBER
KAMCHATKA-KURIL ISLANDS	218, 219, 220, 221, 222, 663
JAPAN	224, 226, 227, 228, 229, 230, 235, 237
BONIN-MARIANA-CAROLINE ISLES. CENTRAL ASIA	209, 211, 212, 213, 216, 614 296, 321, 339, 348, 715, 717, 718
SOUTHWEST INDIAN OCEAN	425, 429, 574

EARTHQUAKE SELECTION:

The selection of earthquakes for which focal mechanisms were routinely computed was based on the magnitudes and depths reported in the USGS PDE listing. Between 1 January 1984 and 31 December 1985, the criterion for earthquake selection was either m_b equal to or greater than 5.8 or m_b equal to or greater than 5.7 if the depth greater was greater than 70 km.

Table 68 lists the hypocenter parameters for the earthquakes in this volume chronologically and by event number for each geographic subdivision. This listing contains a total of 65 earthquakes for which focal mechanisms were computed. Some of the earthquakes in this listing have smaller magnitudes than the above values because the selection criteria were applied to events listed in the USGS PDE listing rather than to events in the PDE Monthly Listing where focal mechanism parameters are published.

Eight earthquakes appearing in the Monthly Listing have magnitudes that exceed the magnitude selection criteria but are not reported in this volume. These events are listed in Table 69. One of these unreported events had magnitudes less than the selection criteria on the PDE and was therefore not selected. The other seven events were not reported because either the quality and/or quantity of first motions was not sufficient to control the nodal planes of the focal mechanism.

COMPUTATIONS:

The focal mechanism solutions for this catalog were computed interactively rather than by a program that produces automatic solutions. Tables 71, 87, 101, 114, 124, and 135 shows the focal mechanism parameters for each of the geographic subdivisions of volume 2. The focal angles which are listed in this catalog and plotted on a lower hemisphere focal sphere projection in figures 30-33, 35-38, 40-42, 44-46, 48-50, and 52-53, were derived

from the earth model of *Jeffreys and Bullen (1958)*. The figures, ordered by event number (table 68), show the nodal plane configuration; the P, T and B axes of the focal mechanism; and the station data used. The size of the symbols on these focal sphere solutions depend on the source of the first motions. The large symbols denote long-period P phase first motions and the small symbols denote the short-period P phase first motions.

DATA SOURCES:

The first motion data were obtained from the following three sources: (1) the first motions reported by station analysts to the National Earthquake Information Center (NEIC); (2) the first motions determined by USGS personnel from seismograms of the World-Wide Standardized Seismograph Network (WWSSN); and (3) the first motions obtained from the waveform data of the Global Digital Seismograph Network (GDSN) and other digital seismograph networks that send digital waveform data to the USGS.

Individual station data, ordered by distance from the event, are shown in tables 72-86, 88-100, 102-113, 115-123, 125-134, and 136-141. The codes and locations for stations used in these tables and listed in the abbreviation table (table 70) were obtained from *Presgrave, Needham and Minsch (1985)*. These station data tables also show: distance in degrees; azimuth in degrees from the event to the station; $dt/d\Delta$ in seconds/degree; focal angles in degrees; and the quality, direction, and source of the first motions.

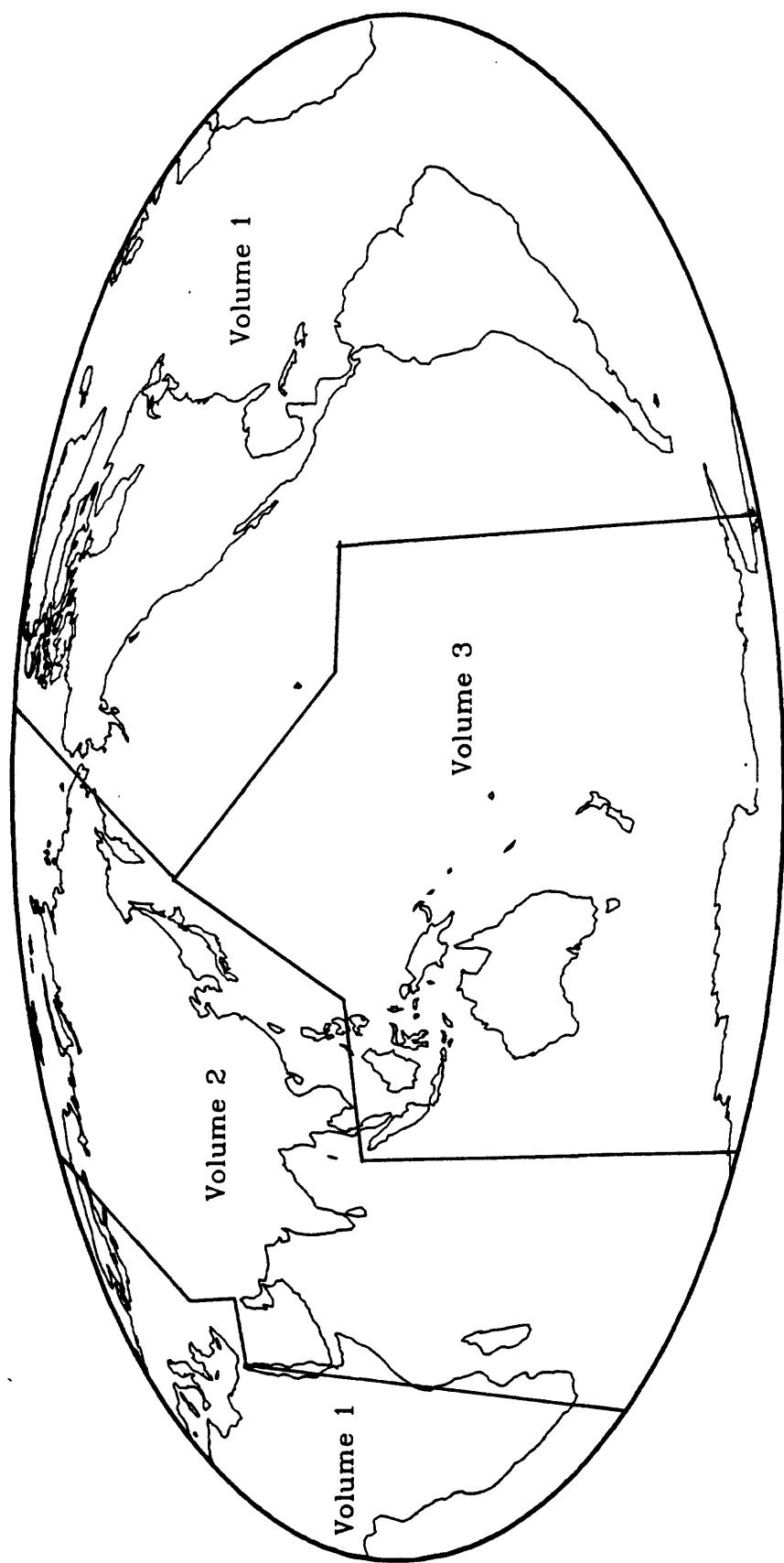
ACKNOWLEDGMENT:

The author is grateful to Madeleine Zirbes for her computer programming assistance in compiling this catalog.

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- Presgrave, B. W., Needham, R.E. and Minsch, J. H., 1985, *Seismograph station codes and coordinates, 1985 edition*: U.S.G.S. Open-file Report 85-714.
- Needham, R. E., 1986, *Catalog of first Motion Focal Mechanisms, 1981-1983*: U.S.G.S. Open-file Report 86-285a, 285b, and 285c.

Figure 27. Mollweide Projection showing geographic regions for volumes 1, 2, and 3.



**Figure 28. Mollweide projection showing geographic subdivisions
for Volume 2.**

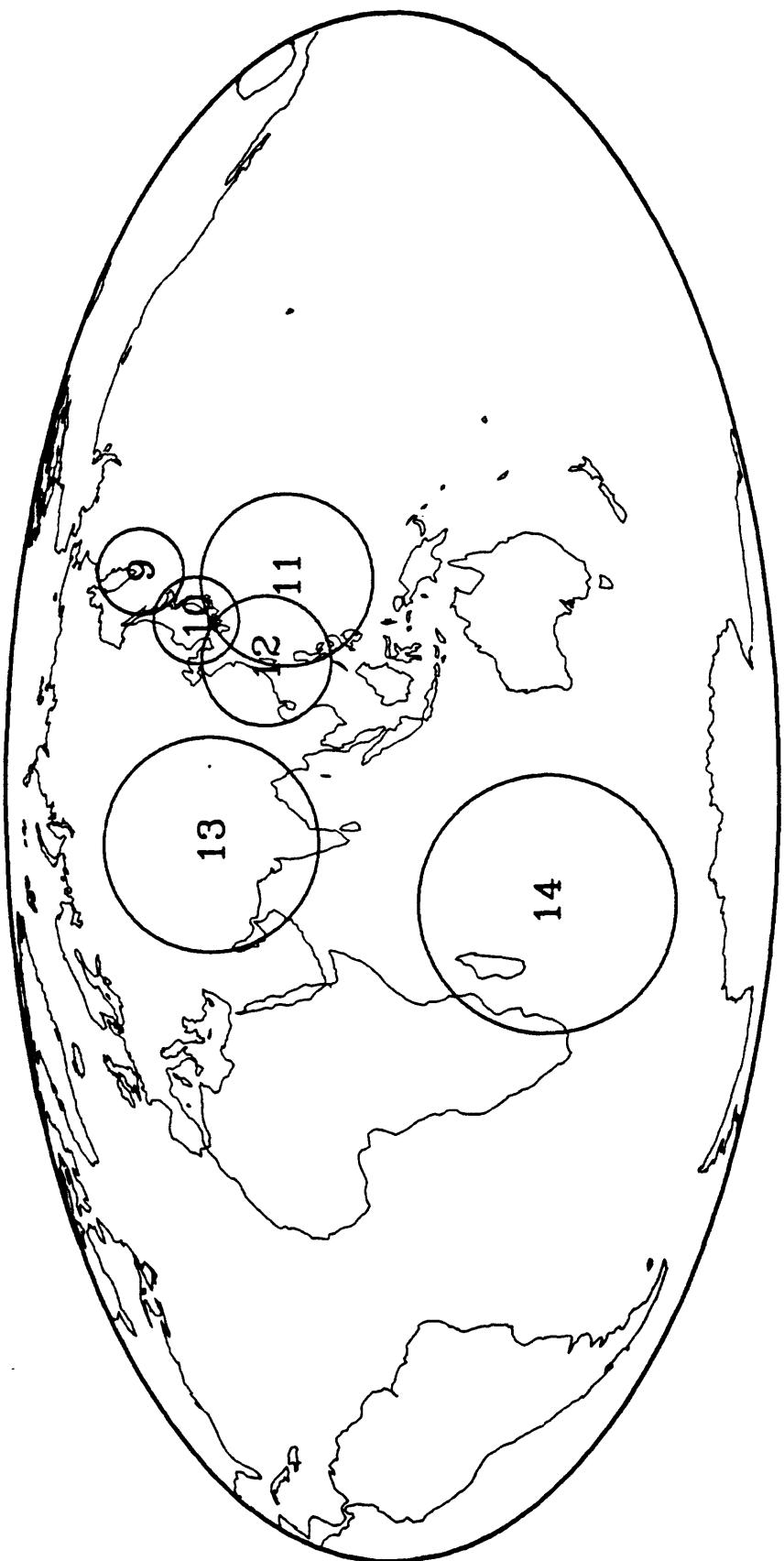


Table 68. Hypocenter parameters for events in volume 2 with focal mechanisms computed

EVT. NO.	DATE UTC	ORIGIN TIME UTC HR MN SEC	GEOGRAPHIC COORDINATES LAT. LONG.	DEPTH km.	MAG mb MS	SD	NO. STA.	REGION
KAMCHATKA-KURIL ISLANDS								
004	01/04/84	22 40 39.3	45.477 N 151.414 E	20	6.2 5.8	0.9	307	KURIL ISLANDS
012	02/01/84	07 28 28.7	49.063 N 146.590 E	573	5.9	0.9	442	SEA OF OKHOTSK
013	02/06/84	14 40 12.1	45.530 N 150.174 E	96	5.6	0.8	192	KURIL ISLANDS
024	03/21/84	02 44 24.3	49.176 N 155.385 E	41D	6.0 5.7	0.9	342	KURIL ISLANDS
026	03/24/84	09 44 02.6	44.117 N 148.192 E	44D	6.1 7.0	1.2	400	KURIL ISLANDS
032	04/20/84	06 31 10.6	50.120 N 148.745 E	582D	6.0	0.9	400	SEA OF OKHOTSK
035	04/23/84	21 40 30.5	47.450 N 146.692 E	414D	6.0	1.0	458	NORTHWEST OF KURIL ISLANDS
088	11/01/84	18 43 44.1	55.204 N 163.692 E	49D	5.8 6.3	1.1	350	OFF EAST COAST OF KAMCHATKA
105	12/03/84	04 08 35.1	44.212 N 148.138 E	65D	6.4	1.0	490	KURIL ISLANDS
108	12/17/84	23 30 21.2	44.424 N 149.180 E	29	5.7 6.0	1.1	275	KURIL ISLANDS
109	12/28/84	10 37 53.7	56.194 N 163.460 E	33N	6.2 7.0	1.1	401	NEAR EAST COAST OF KAMCHATKA
126	03/06/85	22 31 53.2	55.241 N 162.043 E	47D	5.8 5.4	0.9	283	NEAR EAST COAST OF KAMCHATKA
137	03/27/85	12 48 12.3	44.335 N 146.666 E	155D	5.9	1.0	424	KURIL ISLANDS
153	05/02/85	08 55 16.3	48.871 N 156.329 E	43D	5.9 6.4	1.0	335	KURIL ISLANDS REGION
206	10/18/85	04 19 06.4	46.323 N 146.272 E	271	5.9	0.9	394	NORTHWEST OF KURIL ISLANDS
JAPAN								
001	01/01/84	09 03 38.8	33.683 N 136.894 E	368	6.5	1.2	412	NEAR SOUTH COAST OF HONSHU, JAPAN
006	01/17/84	15 31 56.2	36.439 N 141.269 E	42D	5.9 5.5	1.0	322	NEAR EAST COAST OF HONSHU, JAPAN
063	08/06/84	19 06 38.3	32.386 N 131.945 E	46	6.3 6.7	1.2	475	KYUSHU, JAPAN
071	09/13/84	23 48 49.9	35.789 N 137.488 E	10G	6.0 6.1	1.2	456	HONSHU, JAPAN
073	09/18/84	17 02 44.3	34.006 N 141.500 E	48	6.6 6.9	1.0	524	OFF EAST COAST OF HONSHU, JAPAN
074	09/21/84	09 29 53.4	34.003 N 151.507 E	40	5.9 5.7	1.1	310	OFF EAST COAST OF HONSHU, JAPAN
118	01/26/85	21 36 10.8	32.545 N 131.184 E	121	5.8	0.9	334	KYUSHU, JAPAN
138	03/28/85	16 07 06.8	40.310 N 140.362 E	166	6.1	1.0	511	HONSHU, JAPAN
151	04/29/85	02 19 59.6	41.479 N 142.043 E	71	5.7	0.9	326	HOKKAIDO, JAPAN
166	06/17/85	19 12 38.8	30.276 N 132.681 E	26	5.8 5.3	0.9	302	SOUTHEAST OF SHIKOKU, JAPAN
182	08/12/85	03 49 18.0	37.771 N 141.773 E	52	6.0 6.3	1.0	451	NEAR EAST COAST OF HONSHU, JAPAN
198	10/04/85	12 25 51.8	35.816 N 140.093 E	85	5.9	1.0	398	NEAR EAST COAST OF HONSHU, JAPAN
205	10/18/85	03 22 23.6	37.619 N 136.896 E	35	5.9 4.9	1.1	321	NEAR WEST COAST OF HONSHU, JAPAN
BONIN-MARIANA-CAROLINE ISLANDS								
009	01/19/84	16 34 45.1	5.988 N 146.533 E	30D	5.7 5.8	1.1	161	CAROLINE ISLANDS REGION
021	03/06/84	02 17 21.2	29.384 N 138.935 E	457D	6.2	1.0	477	SOUTH OF HONSHU, JAPAN
036	04/24/84	04 11 29.0	30.909 N 138.431 E	403	6.1	1.2	488	SOUTH OF HONSHU, JAPAN
075	09/22/84	18 10 35.5	13.822 N 145.378 E	98D	5.9	1.1	251	MARIANA ISLANDS
106	12/04/84	07 43 23.1	22.609 N 143.334 E	122D	5.8	1.0	249	VOLCANO ISLANDS REGION
140	04/03/85	20 21 36.2	28.230 N 139.525 E	469D	5.9	1.2	427	BONIN ISLANDS REGION
142	04/10/85	16 26 20.5	29.962 N 138.927 E	420	5.8	1.1	469	SOUTH OF HONSHU, JAPAN
180	08/11/85	00 19 01.5	11.156 N 140.217 E	24D	5.8 6.0	1.1	219	WEST CAROLINE ISLANDS
188	09/10/85	06 39 01.7	27.208 N 139.848 E	501D	5.8	1.0	382	BONIN ISLANDS REGION
214	11/07/85	23 34 34.3	7.698 N 137.026 E	34	5.6 5.7	1.1	212	WEST CAROLINE ISLANDS
215	11/08/85	18 40 24.8	27.957 N 140.607 E	42	5.8 6.1	1.1	339	BONIN ISLANDS REGION
218	12/03/85	00 12 13.9	26.939 N 140.494 E	428D	5.9	1.1	404	BONIN ISLANDS REGION
RYUKYU-TAIWAN-NORTHERN PHILIPPINE ISLANDS								
010	01/23/84	07 34 57.7	29.260 N 130.404 E	44	5.8 5.6	1.2	256	RYUKYU ISLANDS
040	05/21/84	15 38 58.7	32.688 N 121.509 E	18	5.7 6.0	1.3	187	EASTERN CHINA
058	07/19/84	23 25 12.8	28.106 N 129.525 E	47	6.1 5.6	1.0	311	RYUKYU ISLANDS
066	08/28/84	19 04 30.5	27.431 N 128.524 E	58	5.9	1.0	321	RYUKYU ISLANDS
090	11/14/84	05 50 13.7	17.017 N 120.851 E	116	5.7	1.0	238	Luzon, PHILIPPINE ISLANDS
113	01/13/85	21 51 22.1	24.107 N 122.433 E	43	5.8 5.3	1.0	267	TAIWAN REGION
123	02/28/85	20 53 47.8	27.462 N 128.449 E	60	5.9	0.9	345	RYUKYU ISLANDS
147	04/23/85	16 15 12.8	15.344 N 120.610 E	188	6.3	1.1	511	Luzon, PHILIPPINE ISLANDS
179	08/09/85	19 59 44.0	16.900 N 120.186 E	22D	5.8 6.1	1.1	263	Luzon, PHILIPPINE ISLANDS

Table 68. Hypocenter parameters for events in volume 2 with focal mechanisms computed continued.

EVT. NO.	DATE UTC	ORIGIN TIME UTC HR MN SEC	GEOGRAPHIC COORDINATES LAT. LONG.	DEPTH km.	MAG mb MS	SD	NO. STA.	REGION
CENTRAL ASIA								
011	01/27/84	13 01 40.2	36.390 N	71.034 E	172D	5.8	1.2	307 AFGHANISTAN-SSR BORDER REGION
016	02/16/84	17 18 41.6	36.431 N	70.826 E	208	6.1	1.0	390 HINDU KUSH REGION
023	03/19/81	20 28 38.2	40.320 N	63.350 E	15D	6.5 7.0	0.9	427 UZBEK, SSR
051	07/01/84	10 12 20.9	36.471 N	70.906 E	204D	5.8	1.0	327 KINDU KUSH REGION
103	11/28/84	10 29 21.8	26.697 N	97.085 E	10D	5.9 5.7	1.1	215 BURMA
174	07/29/85	07 54 44.0	36.190 N	70.896 E	99	6.6	1.0	509 HINDU KUSH REGION
175	08/02/85	07 46 53.3	36.174 N	70.780 E	120	6.1	0.9	378 HINDU KUSH REGION
183	08/23/85	12 41 56.1	39.431 N	75.224 E	7D	6.4 7.3	1.2	417 SOUTHERN XINJIANG, CHINA
204	10/13/85	15 59 51.2	40.301 N	69.823 E	16G	5.8 5.9	1.0	327 TAJIK, SSR
209	10/29/85	13 13 44.6	36.681 N	54.750 E	53	6.0 5.9	1.0	330 IRAN

SOUTHWEST INDIAN OCEAN

EVT. NO.	DATE UTC	ORIGIN TIME UTC HR MN SEC	GEOGRAPHIC COORDINATES LAT. LONG.	DEPTH km.	MAG mb MS	SD	NO. STA.	REGION
025	03/21/84	08 27 57.4	43.950 S	77.915 E	10G	5.9 5.7	1.1	182 MID-INDIAN RISE
089	11/06/84	07 58 51.3	18.876 S	67.352 E	10G	6.2 5.8	0.8	344 MID-INDIAN RISE
156	05/14/85	13 24 57.8	10.610 S	41.423 E	10G	6.0 5.5	0.9	287 NORTHWEST OF MADAGASCAR
157	05/14/85	18 11 08.9	10.562 S	41.424 E	10G	6.4 6.0	0.9	355 NORTHWEST OF MADAGASCAR
159	05/16/85	14 20 25.1	29.081 S	77.735 E	10G	5.9 6.0	1.0	316 MID-INDIAN RISE
224	12/24/85	04 09 41.2	35.090 S	54.272 E	10G	6.0 6.0	1.0	229 SOUTH INDIAN OCEAN

Table 69. Hypocenter parameters for events in volume 2 that met magnitude criteria but are not in this catalog.

EVT. NO.	DATE UTC	ORIGIN TIME UTC HR MN SEC	GEOGRAPHIC COORDINATES LAT. LONG.	DEPTH km.	MAG mb MS	SD	NO. STA.	REGION
MIDDLE AMERICA								
	03/30/84	07 59 52.9	17.362 N	59.633 W	103	5.8	0.9	226 LEEWARD ISLANDS
	09/15/85	07 57 53.5	17.974 N	97.158 W	65	5.9	1.0	317 OAXACA, MEXICO
SOUTH AMERICA								
	01/13/84	02 29 00.9	3.863 S	78.494 W	103	5.8	0.9	226 PERU-ECUADOR BORDER REGION
	06/05/84	04 15 24.3	7.819 S	76.708 W	33N	5.8 5.1	0.9	243 NORTHERN PERU
	12/11/84	23 22 19.3	22.407 S	68.599 W	92	5.7	1.1	245 NORTHERN CHILE
	03/03/85	23 38 31.4	32.738 S	71.215 W	33N	6.3 6.4	1.3	127 NEAR COAST OF CENTRAL CHILE
	03/04/85	00 32 21.8	33.207 S	71.663 W	33N	6.0 6.7	1.0	111 NEAR COAST OF CENTRAL CHILE
	03/04/85	03 17 54.4	34.115 S	71.905 W	33N	5.8 6.2	1.1	119 NEAR COAST OF CENTRAL CHILE
	10/24/85	01 48 55.9	31.386 S	68.605 W	110	5.7	1.1	208 SAN JUAN PROV., ARGENTINA
	10/31/85	21 49 20.2	28.692 S	63.171 W	596D	5.8	0.9	296 SAN DIEGO DEL ESTERO, ARGENTINAQ

MID ATLANTIC RIDGE

12/07/84	10 19 10.7	1.423 S	15.055 W	10G	5.9 5.7	1.2	223	N. OF ASCENSION ISLANDS
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SOUTH ATLANTIC OCEAN

08/24/84	16 53 07.1	58.917 S	16.521 W	10G	5.8 5.5	1.2	62	SW ATLANTIC OCEAN
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TABLE 70

Code	Station Name and Geographic Region	Code	Station Name and Geographic Region
AAI	Amban, Maluku, Indonesia	BNG	Bangui, Central African Republic
AAS	Arctowski Station, South Shetland Islands, Antarctica	BNH	Berlin, New Hampshire, U.S.A.
ABJ	Abashiri, Hokkaido, Japan	BNS	Bensberg, Nordrhein-Westfalen, Fed. Rep. of Germany
ACM	Allegan, Michigan, U.S.A.	BNT	Bandirma, Turkey
ACO	Alabaster Cavern State Park, Oklahoma, U.S.A.	BOCO	Bogota, Calambia
ACX	Acapulco, Guerrero, Mexico	BOG	Bogota, Calambia
ADE	Adelaide (Mount Bonython), South Australia, Australia	BOH	Bohocortia, Bearn, France
ADH	Angra do Heroismo, Azores, Portugal	BOM	Bombay (Calaba), Maharashtra, India
ADK	Adak, Alaska, U.S.A.	BPA	Boggy Peak, Antigua, Antigua and Barbuda
AFC	Alfacar, Spain	BPI	Bernard Price Institute, Johannesburg Transvaal, South Africa
AFI	Afiomolu, Samoa Islands	BOA	Mbengga, Fiji
AJI	Ajiro, Honshu, Japan	BRG	Berggiesshubel, German Dem. Rep.
AKU	Akureyri, Iceland	BRK	Berkeley—Haviland, California, U.S.A.
ALE	Alert, Northwest Territories, Canada	BRL	Berlin—Free University Berlin (West), Fed. Rep. of Germany
ALI	Alicante, Spain	BRN	Berlin, Berlin (West), Fed. Rep. of Germany
ALM	Almeria, Spain	BRS	Brisbane, Queensland, Australia
ALP	Ascoli Picena, Marche, Italy	BRT	Bori-Castellana, Puglia, Italy
ALD	Albuquerque, New Mexico, U.S.A.	BRY	Bratagas, Yugoslavia
ALT	Altintas, Turkey	BSF	Ballan de Servance, Franche Comte, France
AMM	Anacanda, Mantano, U.S.A.	BSI	Bando Aceh, Sumotera, Indonesia
AN10	Anna, Ohio, U.S.A.	BTO	Boatou (Paatau), Inner Mongolia, China (Mainland)
AN11	Anna, Ohio, U.S.A.	BTO	Boatou (Paatau), Inner Mongolia, China (Mainland)
AN12	Anna, Ohio, U.S.A.	BUC	Bucharest, Romania
AN3	Anna, Ohio, U.S.A.	BUC1	Bucharest, Romania
AN4	Anno, Ohio, U.S.A.	BUD	Budapest, Hungary
AN7	Anno, Ohio, U.S.A.	BUH	Buehlerhoehe, Baden-Wurttemberg, Fed. Rep. of Germany
AN8	Anno, Ohio, U.S.A.	BUL	Bulawayo, Zimbabwe
AN9	Anno, Ohio, U.S.A.	BUS	Buena Vista, Costa Rica
ANM	Name—Anvil Mountain, Alaska, U.S.A.	BUT	Butte, Montana, U.S.A.
ANMO	Albuquerque, New Mexico, U.S.A.	CAF	Colviac, Auvergne, France
ANP	Anpu, China (Taiwan)	CAI	Caico, Rio Grande do Norte, Brazil
ANR	Andizhan, Uzbek S.S.R., U.S.S.R.	CAN	Canberra, Australian Cap. Terr., Australia
ANT	Antofagasta, Antofagasto, Chile	CAR	Caracas, Venezuela
ANTO	Ankara, Turkey	CAW	Cannon Point, North Island, New Zealand
AQU	L'Aquila, Abruzzo, Italy	CBI	Chichi-shima (Chichijima), Bonin Islands, Japan
ARG	Chiripo, Costa Rica	CBX	Cerro Bola, Baja California, Mexico
ARE	Arequipa (Characato), Peru	CBZ	Campbell Island, Campbell Island, New Zealand
ARN	Arnold Ranch, California, U.S.A.	CCH	Cochabamba, Bolivia
ARO	Arta Observatory, Djibouti	CCMT	Clark Canyon Reservoir, Montana, U.S.A.
ASA	Asahikawa, Hokkaido, Japan	CCP	Cebu City (Lahug), Cebu, Philippines
ASPA	Alice Springs, Northern Territory, Australia	CD2	Chengdu (Chengtu), Sichuan, China (Mainland)
ATA	Atar, Djibouti	CDF	Champ du Feu, Alsoce, France
ATB	Altamiro, Para, Brazil	CDM	Cerro de la Muerte, Costa Rica
ATH	Athens Observatory, Greece	CDR	Cadarache, Provence, France
ATO	Altono, Oklahoma, U.S.A.	CDY	Cope Darby, Alaska, U.S.A.
AVE	Averroes, Morocco	CEA	Ceahlau, Romania
AVF	Avril sur Loire, Nivernais, France	CEN	Cerro Negro, San Juan, Argentina
AVY	Angavokely, Madagascar	CER	Ceres, Cape Province, South Africa
BAA	Buenas Aires, Buenos Aires, Argentina	CEY	Cerknica, Yugoslavia
BACH	Lo Barnechea, Santiago, Chile	CFA	Caranet Fontano, San Juan, Argentina
BAF	Belacker, Alsoce, France	CFI	College Fiord, Alaska, U.S.A.
BAG	Baguio City, Luzon, Philippines	CFR	Carcaliu, Romania
BAL	Ballidu, Western Australia, Australia	CGN	Colugareni, Romania
BAO	Brasilia Arroy, Distrito Federal, Brazil	CGP	Gagoyan de Oro, Mindanao, Philippines
BAR	Barrett, California, U.S.A.	CHCH	Chadas Angosturo, Santiago, Chile
BBI	Big Bend, Idaho, U.S.A.	CHG	Chiang Mai, Thailand
BCAO	Bangui, Central African Republic	CHO	Choshi, Honshu, Japan
BCK	Bucok, Turkey	CHTO	Chiong Mai, Thailand
BDF	Brasilia, Distrito Federal, Brazil	CIN	Cine, Turkey
BDT	Bhumibol Dam, Thailand	CIR	Chiredzi, Zimbabwe
BDW	Boulder, Wyoming, U.S.A.	CLC	China Lake, California, U.S.A.
BEC	Bermudo—Columbia, Bermuda	CLI	Colonesti, Romania
BER	Bergen, Norway	CLK	Chileko, Malawi
BFD	Bellfield, Victoria, Australia	CLL	Collmberg, German Dem. Rep.
BFS	Buffelsfontein, Transvaal, South Africa	CLO	Closani, Romania
BGF	Bois d'Agond, Bourbonnais, France	CLX	Calx Mountain, Montana, U.S.A.
BGG	Burg Eltz, Rheinland-Pfalz, Fed. Rep. of Germany	CMP	Campulung, Romania
BHD	Baghdad, Iraq	CMS	Cobar Meteorology Station, New South Wales, Australia
BHG	Bad Reichenhall, Bayern, Fed. Rep. of Germany	CN2	Changchun, Jilin, China (Mainland)
BHO	Bethel, Oklahoma, U.S.A.	CNG	Changalane, Mozambique
BIM	Bigot, Martinique	CNP	Catarman, Samar, Philippines
BJI	Beijing (Peking), Beijing, China (Mainland)	COI	Caimbra, Portugal
BKB	Balikpapan, Kalimantan, Indonesia	COL	College Outpost, Alaska, U.S.A.
BKR	Bakuriani, Georgian S.S.R., U.S.S.R.	COM	Comitan, Chiapas, Mexico
BKS	Berkeley—Byerly, California, U.S.A.	CON	Concepcion, Concepcion, Chile
BLA	Blacksburg, Virginia, U.S.A.	COO	Cooney (Armidale), New South Wales, Australia
BLF	Bloemfontein, Orange Free State, South Africa	COP	Copenhagen, Denmark
BMA	Barra Mansa, Rio de Janeiro, Brazil	COR	Carvallis, Oregon, U.S.A.
BMN	Battle Mountain, Nevada, U.S.A.	COZ	Cazia, Romania
BRM	Bala Mare, Romania		

TABLE 70

Code	Station Name and Geographic Region	Code	Station Name and Geographic Region
CPK	Cone Peak, Hawaii, U.S.A.	FBA	Fairbanks, Alaska, U.S.A.
CRM	Caravelle, Martinique	FBAL	Fairbanks—Long Period, Alaska, U.S.A.
CRT	Cartuja (Granada), Spain	FBAS	Fairbanks—Short Period, Alaska, U.S.A.
CRX	Cerrilla, Mexico, Mexico	FCC	Fort Churchill, Manitoba, Canada
CSIL	Creal Springs, Illinois, U.S.A.	FCH	Forellanes, Santiago, Chile
CSN	Chicaosen, Chiapas, Mexico	FDF	Fort de France (Marne des Cadets), Martinique
CTA	Charters Towers, Queensland, Australia	FFC	Flin Flon, Manitoba, Canada
CTAO	Charters Towers, Queensland, Australia	FHC	Fickle Hill, California, U.S.A.
CTI	Castello Tesino, Trentino-Alto Adige, Italy	FIR	Firenze Ximeniano (Florence), Toscana, Italy
CTT	Catalca, Turkey	FKJ	Fukue, Kyushu, Japan
CUM	Cumana, Venezuela	FKK	Fukuoka, Kyushu, Japan
CVF	Calvi, Corsica, France	FKS	Fukushima, Honshu, Japan
CVO	Cavasna, Romania	FLN	La Folliere, Normandie, France
CVP	Caliao Caves, Luzon, Philippines	FOC	Focsani, Romania
CWC	Cottonwood Creek, California, U.S.A.	FRB	Frobisher, Northwest Territories, Canada
CYA	Chaya, Santiago del Estero, Argentina	FRF	La Foret Royale, Provence, France
DAF	Dafare, Djibouti	FRI	Friant, California, U.S.A.
DAG	Danmarkshavn, Greenland	FSA	Cafayete, Salta, Argentina
DAV	Davao, Mindanao, Philippines	FUK	Fukui, Honshu, Japan
DBN	De Bilt, Netherlands	FUR	Fuerstenfeldbruck, Bayern, Fed. Rep. of Germany
DCI	Dry Creek, Idaho, U.S.A.	FVM	French Village, Missouri, U.S.A.
DCN	Croghan, Eire	GAC	Glen Almond, Quebec, Canada
DDK	Dunsink Observatory, Eire	GAP	Gormisch-Partenkirchen, Bayern, Fed. Rep. of Germany
DDR	Dadaira, Honshu, Japan	GBA	Gouribidanur Array, Karnataka, India
DES	Desert, Hawaii, U.S.A.	GBO	Fort Gibson, Oklahoma, U.S.A.
DEV	Deva, Romania	GCC	Granite Creek, California, U.S.A.
DIM	Dimitrovgrad, Bulgaria	GDH	Godhavn, Greenland
DIX	Grand Dixence, Switzerland	GEO	Georgetown, District of Columbia, U.S.A.
DKM	Kilmashogue, Eire	GIB	Gibilmanno, Sicily, Italy
DL2	Dalian (Luda), Liaoning, China (Mainland)	GIE	Galapagos Islands, Galapagos Islands, Ecuador
DLE	Lyans Estate, Eire	GLA	Glamis, California, U.S.A.
DMK	Demirkay, Turkey	GLD	Golden, Colorado, U.S.A.
DMN	Damon, Nepal	GNZ	Gisborne, North Island, New Zealand
DMU	Kingscourt, Eire	GOL	Golden (Bergen Park), Colorado, U.S.A.
DON	Dangola, Missouri, U.S.A.	GPA	Galpazarı, Turkey
DOU	Dourbes, Belgium	GRB1	Graefenberg Array (Bruennthal) Bayern, Fed. Rep. of Germany
DRV	Dumont d'Urville (Pointe Geologie, Adelie) Greater Antarctica, Antarctica	GRC	Garchy, Nivernais, France
DSH	Dushonbe (Stolinobad), Tajik S.S.R., U.S.S.R.	GRC1	Graefenberg Array (Eglofsdorf) Bayern, Fed. Rep. of Germany
DST	Dursunbey, Turkey	GRF	Grafenbergs Array (Erlangen) Bayern, Fed. Rep. of Germany
DUG	Dugway, Utah, U.S.A.	GRFO	Graefenberg, Bayern, Fed. Rep. of Germany
DUI	Duronia, Molise, Italy	GRG	Griva, Greece
DZM	Mont Dzumac, New Caledonia	GRM	Grahamstown, Cape Province, South Africa
EAB	Aberfayle, Scotland, United Kingdom	GRR	Gorron, Normandie, France
EAU	Auchincruin, Scotland, United Kingdom	GRS	Goris, Armenian S.S.R., U.S.S.R.
EBH	Black Hill, Scotland, United Kingdom	GSC	Goldstone, California, U.S.A.
EBL	Broadlaw, Scotland, United Kingdom	GSH	Grassau, Nordrhein-Westfalen, Fed. Rep. of Germany
ECA	El Cajon, California, U.S.A.	GTA	Gao tai, Gansu, China (Mainland)
ECB	Carrickbyrne Hill, Eire	GUA	Guam (Santa Rosa), Guam, Mariana Islands
ECH	Echery (Ste.-Marie-aux-Mines), Lorraine, France	GUD	Guadarrama, Spain
ECK	Cauldkine Hill, Scotland, United Kingdom	GUMO	Guam, Guam, Mariana Islands
ECP	Carnsore Point, Eire	GUV	Guri, Venezuela
EDC	Edincik, Turkey	GWF	Grand Wintersberg, Alsace, France
EDI	Edinburgh, Scotland, United Kingdom	GYA	Guiyang (Kweiyang), Guizhou, China (Mainland)
EDM	Edmonton, Alberta, Canada	GZH	Guangzhou (Canton), Guangdong, China (Mainland)
EDU	Dundee, Scotland, United Kingdom	GZR	Gura Zlato, Romania
EHOR	Hornachuelos, Spain	HAC	Hochinabe, Honshu, Japan
EKA	Eskdalemuir Array, Scotland, United Kingdom	HAM	Hamburg, Hamburg, Fed. Rep. of Germany
ELL	Elmoli, Turkey	HAU	Haudampre, Franche Comte, France
ELO	Loigieolmond, Scotland, United Kingdom	HCY	Herceg Novi, Yugoslavia
ELT	Yeltsovko, R.S.F.S.R., U.S.S.R.	HDC	Heredia, Costa Rica
EMS	Emrosson-Mur, Switzerland	HFS	Hagfors, Sweden
ENIJ	Njar, Spain	HMC	Mohhot, Inner Mongolia, China (Mainland)
ENN	Epen, Netherlands	HIM	Himeji, Honshu, Japan
ENX	Ensenada, Baja California, Mexico	HIR	Hiroshima, Honshu, Japan
EPA	Esparza, Costa Rica	HJJ	Hachija-jima (Hajidoyazima), Bonin Islands, Japan
EPF	Esporros, Gascogne, France	HKC	Hang Kong, Hong Kong
EPLA	Piasencio, Spain	HLD	Halaksitan, Djibouti
EPT	El Paso, Texas, U.S.A.	HLP	Hilino Pali, Hawaii, U.S.A.
ERC	Erice, Sicily, Italy	HLW	Helwan, Egypt
ESA	Esa Ala, D'Entrecasteaux Islands, Papua New Guinea	HMM	Hamamatsu (Hamamatu), Honshu, Japan
ESCF	Escot, Bearn, France	HNM	Heniu Mare, Romania
ESK	Eskdalemuir, Scotland, United Kingdom	HNR	Maniara, Solomon Islands
ESR	Escape Road, Hawaii, U.S.A.	HOF	Hof, Bayern, Fed. Rep. of Germany
ESY	Staneypath, Scotland, United Kingdom	HON	Honolulu, Hawaii, U.S.A.
ETA	Tara, Eire	HPU	Hale Pahaku, Hawaii, U.S.A.
EUR	Eureka, Nevada, U.S.A.	HRT	Hereke, Turkey
EVA	Evander, Transvaal, South Africa	HYR	Holter Research Foundation—York Bridge Montana, U.S.A.
EVAL	Valverde del Camino, Spain	HUA	Huancayo, Peru
EZN	Ezine, Turkey	HVD	Hendrik Verwoerd Dam, Cape Province, South Africa

TABLE 70

Code	Station Name and Geographic Region	Code	Station Name and Geographic Region
HYB	Hyderabad—Nat. Geophysical Research Inst. Andhra Pradesh, India	KNK	Knik Glacier, Alaska, U.S.A.
ICR	Volcan Irazu, Costa Rica	KNT	Kendrikon, Greece
IFR	Ifra, Morocco	KOB	Kobe, Honshu, Japan
IIC	Santo Rito Coyotepec, Mexico, Mexico	KOC	Kochi, Shikoku, Japan
IID	Iido, Honshu, Japan	KOD	Kodaikanal, Tamil Nadu, India
III	Igualo—Cerro de Tuxpan, Guerrero, Mexico	KOF	Kofu, Honshu, Japan
IIM	Instituto de Ingenieria, UNAM Distrito Federal, Mexico	KON	Kongsberg, Norway
IIP	El Pino, Mexico, Mexico	KONO	Kongsberg, Norway
IIT	Tonantzintla, Pueblo, Mexico	KOU	Koumac, New Caledonia
ILT	Iultin, R.S.F.S.R., U.S.S.R.	KRA	Krokow, Poland
IMA	Indian Mountain, Alaska, U.S.A.	KRI	Karai, Zimbabwe
IN1	Indiana Array, Indiana, U.S.A.	KRO	Koro, Fiji
IN2	Indiana Array, Indiana, U.S.A.	KRP	Korapiro, North Island, New Zealand
IN3	Indiana Array, Indiana, U.S.A.	KSH	Kashi (Kashgar), Xinjiang, China (Mainland)
IN4	Indiana Array, Indiana, U.S.A.	KSP	Ksiaz, Poland
INK	Inuvik, Northwest Territories, Canada	KSR	Koster, Transvaal, South Africa
INY	Ithaco, New York, U.S.A.	KSU	Kousour, Djibouti
IPM	Ipoh, Peninsular Malaysia, Malaysia	KTG	Kop Tobin, Greenland
IR2	Iran Long-Period Array, Iran	KUM	Kumamoto, Kyushu, Japan
IR4	Iran Long-Period Array, Iran	KUS	Kushiro, Hokkaido, Japan
IR5	Iran Long-Period Array, Iran	KVG	Kovieng, New Ireland, Papua New Guinea
IR7	Iran Long-Period Array, Iran	KVT	Kavak, Turkey
IRZ	Volcan Irazu, Costa Rica	KYS	Kiyosumi, Honshu, Japan
ISA	Isobello, California, U.S.A.	KZN	Kozani, Greece
ISI	Ishigaki-shima, Ryukyu Islands, Japan	LAC	Landers, California, U.S.A.
ISK	Istanbul—Kondilli, Turkey	LAT	Lae, New Guinea, Papua New Guinea
ISN	Ishinomaki, Honshu, Japan	LAV	Laguna Verde, Valparaiso, Chile
ISO	Mount Isa, Queensland, Australia	LBF	Les Buteaux, Nivernais, France
ISR	Istria, Romania	LCCM	Lewis and Clark Caverns, Montana, U.S.A.
ISSF	Issorbe, Bearn, France	LCI	Lecce, Puglia, Italy
IST	Istanbul, Turkey	LCR	La Lucha, Costa Rica
ITR	Itaparica, Pernambuco, Brazil	LDF	La Druitiere, Normandie, France
I2M	Izmir, Turkey	LDM	Libby Dam, Montana, U.S.A.
I2U	Izuhoro, Kyushu, Japan	LEM	Lembong, Java, Indonesia
JACH	Johuel, Aconcagua, Chile	LFF	La Frestal, Guyenne, France
JAS	Jamestown, California, U.S.A.	LGBM	Gray Butte, California, U.S.A.
JAS1	Jamestown, California, U.S.A.	LGN	Logunillos, Venezuela
JAU	Joout, Bearn, France	LGR	Logrono, Spain
JAY	Jayapura, Irian Jaya, Indonesia	LHC	Lakehead University (Thunder Bay), Ontario, Canada
JCK	Jackerath, Nordrhein-Westfalen, Fed. Rep. of Germany	LHD	Little Hoodoo Mountain, Montana, U.S.A.
JCT	Junction, Texas, U.S.A.	LHE	Lhers, Bearn, France
JER	Jerusalem, Israel	LIS	Lisbon, Portugal
JHP	Judd Hill Plantation, Arkansas, U.S.A.	LIT	Litokhoron, Greece
JMB	Yambol, Bulgaria	LJU	Ljubljana (Ljuboch), Yugoslavia
JOS	Josvaf, Hungary	LLA	Lionado, California, U.S.A.
JOZ	Jozini, Natal, South Africa	LLS	Linthol—Limmern, Switzerland
KAE	Koeno, Hawaii, U.S.A.	LM2	Limo (Magdaleno), Peru
KAG	Kagoshima, Kyushu, Japan	LMG	Lomington, New Guinea, Papua New Guinea
KAS	Kastamonu, Turkey	LMR	La Mourre, Provence, France
KBA	Borrage Koelnbrein, Austria	LNV	Longovilo, Valparaiso, Chile
KBL	Kabul, Afghanistan	LOE	Loei, Thailand
KBS	Kingsbay, Svalbard, Norway	LON	Longmire, Washington, U.S.A.
KCT	Koracobey, Turkey	LOR	Lormes (Somee), Nivernais, France
KDC	Kodiak, Alaska, U.S.A.	LPA	La Plato, Buenos Aires, Argentina
KDS	Kedougou, Senegal	LPB	La Poz, Bolivia
KDZ	Kurdzholi, Bulgaria	LPF	Le Pertre, Orleans, France
KEV	Keva, Finland	LPG	La Plagne, Savoie, France
KGM	Kluang, Peninsular Malaysia, Malaysia	LPO	Le Pouchou, Guyenne, France
KGT	Korobiga, Turkey	LPS	La Polma, El Salvador
KHC	Koperske Hory, Czechoslovakia	LOT	Los Oueltehue, Santiago, Chile
KHE	Kheis, R.S.F.S.R., U.S.S.R.	LRG	Lorgues, Provence, France
KHT	Khao Laem Dam, Thailand	LRM	Limekiln Ridge, Montana, U.S.A.
KHU	Kohuku, Hawaii, U.S.A.	LSA	Lhasa, Tibet, China (Mainland)
KIC	Koso Boko, Ivory Coast	LSF	Lo Souterraine, Morche, France
KIP	Kipapo, Hawaii, U.S.A.	LST	Lone Star, Missouri, U.S.A.
KIS	Kishinev, Moldavian S.S.R., U.S.S.R.	LSZ	Lusaka, Zambia
KJF	Kajaani, Finland	LTX	Lojitos, Texas, U.S.A.
KKM	Kota Kinabalu, Sabah, Malaysia	LWI	Lwiro, Zaire
KKN	Kokoni, Nepal	LZH	Lanzhou (Lonchou), Gonsu, China (Mainland)
KLB	Kellerberrin, Western Australia, Australia	MADF	Modeleine, Bearn, France
KLG	Kalgoorlie, Western Australia, Australia	MAJO	Motsushiro, Honshu, Japan
KLL	Kalltalsperre Nordrhein-Westfalen, Fed. Rep. of Germany	MAL	Mologo, Spain
KMG	Kumagoya, Honshu, Japan	MAN	Manila (Diliman), Luzon, Philippines
KMI	Kunming, Yunnan, China (Mainland)	MAP	Mactan, Cebu, Philippines
KMR	Kremsmuenster, Austria	MAT	Motsushiro, Honshu, Japan
KNA	Kununurra, Western Australia, Australia	MAW	Mawson, Greater Antarctica, Antarctica
KNH	Kipuka Nene, Hawaii, U.S.A.	MBC	Mould Bay, Northwest Territories, Canada
		MBL	Marble Bar, Western Australia, Australia
		MBO	Mbour, Senegal
		MBU	Mbu, Fiji

TABLE 70

Code	Station Name and Geographic Region	Code	Station Name and Geographic Region
MCO	Macquarie Island, Macquarie Island, Australia	NNT	Nang Plab, Thailand
MCW	Mount Constitution, Washington, U.S.A.	NOP	Nopah Range, California, U.S.A.
MDJ	Mudanjiang, Heilongjiang, China (Mainland)	NOU	Noumea, New Caledonia
MDN	Marne Daniel, Dominica	NPA	Nampula, Mozambique
MDZ	Mendoza, Mendoza, Argentina	NPH	North Pit, Hawaii, U.S.A.
MEI	Melilli, Basilicata, Italy	NRA0	NORESS Array Site A0, Norway
MEK	Meekatharra, Western Australia, Australia	NRN	Naryn, Kirghiz S.S.R., U.S.S.R.
MEM	Membach, Belgium	NST	Nokhon Sawan, Thailand
MEX	Mexico City, Distrito Federal, Mexico	NUR	Nurmijarvi, Finland
MFF	Saint Martin du Fouilloux, Poitou, France	NWA0	Norrogin, Western Australia, Australia
MGD	Magadan 1, R.S.F.S.R., U.S.S.R.	OBN	Obninsk, R.S.F.S.R., U.S.S.R.
MHC	Mount Hamilton (Lick Observatory), California, U.S.A.	BOB	Obock, Djibouti
MHI	Mashhad, Iran	OCN	Over Castle Rock, New York, U.S.A.
MIM	Milo, Maine, U.S.A.	OCO	Oklahoma City, Oklahoma, U.S.A.
MIN	Mineral, California, U.S.A.	OFU	Ofunato, Honshu, Japan
MIS	Mishima, Honshu, Japan	OGA	Obergurgl, Austria
MIT	Mito, Honshu, Japan	OGE	Ogeu, Bearn, France
MIY	Miyako, Honshu, Japan	OHR	Ohrid, Yugoslavia
MKA	Makapuhi, Hawaii, U.S.A.	OIT	Oita, Kyushu, Japan
MKL	Moskali, Djibouti	OKA	Okayama, Honshu, Japan
MKS	Ujungpandang (Makassar), Sulawesi, Indonesia	ONA	Onahama, Honshu, Japan
MLH	Mauna Loa, Hawaii, U.S.A.	ORI	Oriolo, Calabria, Italy
MLR	Muntele Rosu, Romania	ORO	Oropa, Piemonte, Italy
MLS	Moulis, Gascogne, France	ORT	Oak Ridge, Tennessee, U.S.A.
MLX	Mauna Loa 2, Hawaii, U.S.A.	ORV	Oroville, California, U.S.A.
MMB	Musomishto, Bulgaria	OSA	Osaka, Honshu, Japan
MMK	Mattmark, Switzerland	OSH	Oshima, Bonin Islands, Japan
MMN	Mormanno, Calabria, Italy	OSK	Osaka (Tokayosuyomo), Honshu, Japan
MNA	Mina, Nevada, U.S.A.	OSS	Ova Spin, Switzerland
MNG	Mongohaa, North Island, New Zealand	OTT	Ottawa, Ontario, Canada
MNI	Manado, Sulawesi, Indonesia	OUR	Ournapolis, Greece
MNS	Mont Asolo, Lazio, Italy	OUT	Outlet, Hawaii, U.S.A.
MNT	Montreal, Quebec, Canada	OWA	Owase, Honshu, Japan
MNV	Mina, Nevada, U.S.A.	OXM	Oxtotitan, Mexico, Mexico
MOM	Momote, Admiralty Islands, Papua New Guinea	OYM	Oyama, Honshu, Japan
MOT	McDonald Observatory, Texas, U.S.A.	OZB	Mount Ozzard, British Columbia, Canada
MOX	Moxa, German Dem. Rep.	OZC	Ocozocuautla, Chiapas, Mexico
MRG	Morgantown, West Virginia, U.S.A.	PAA	Ponguna, Bougainville Island, Papua New Guinea
MRK	Morioka, Honshu, Japan	PAD	Podova, Veneto, Italy
MRL	Mormol, Guatemala	PAL	Palisades, New York, U.S.A.
MRT	Murotomisaki, Shikoku, Japan	PAP	Pandan, Panay, Philippines
MRWA	Morowa, Western Australia, Australia	PARM	Anticline Ridge, California, U.S.A.
MSI	Messina I.N.G., Sicily, Italy	PAS	Posadeno, California, U.S.A.
MSL	Mosul, Iraq	PBJ	Presa Benito Juarez, Oaxaca, Mexico
MSO	Missoula, Montana, U.S.A.	PBX	Punto Bando, Baja California, Mexico
MSZ	Milford Sound, South Island, New Zealand	PCA	Pinnacle, Alaska, U.S.A.
MSZ	Milford Sound, South Island, New Zealand	PCC	Pilarcitos Creek, California, U.S.A.
MTD	Mount Darwin, Zimbabwe	PCH	Pirque, Santiogo, Chile
MTE	Monteigas, Portugal	PCO	Ponca City, Oklahoma, U.S.A.
MTH	Montachique, Portugal	PCR	La Plaine des Cafres, Reunion
MTN	Monton, Northern Territory, Australia	PCRM	Curry Mountain, California, U.S.A.
MTS	Motsue, Honshu, Japan	PCT	Pak Chong, Thailand
MTY	Matsuyama (Matuyama), Shikoku, Japan	PDA	Ponto Delgada, Azores, Portugal
MUD	Monsted Underground, Denmark	PDI	Porto d'Ischio, Campania, Italy
MUN	Mundaring, Western Australia, Australia	PEL	Peldehue, Santiago, Chile
MVH	Mountain View, Hawaii, U.S.A.	PET	Petropovlovsk-Kamchotskiy, R.S.F.S.R., U.S.S.R.
MVI	Minami-daito-jima, Ryukyu Islands, Japan	PGC	Pacific Geoscience Centre, Sidney British Columbia, Canada
MVM	Montagne du Vauclin, Martinique	PGP	Puerto Galera, Mindoro, Philippines
MWC	Mount Wilson, California, U.S.A.	PHAM	Holian Ranch, California, U.S.A.
MWH	Mokuaweoweo, Hawaii, U.S.A.	PHC	Port Hardy, British Columbia, Canada
MYK	Miyako-jima, Ryukyu Islands, Japan	PIM	Presa del Infiernillo, Michoacan, Mexico
MZF	Mozirat, Bourbonnais, France	PIO	Pinolepa Nacional, Oaxaca, Mexico
MZX	Mozatlan, Sinaloa, Mexico	PIP	Pasquin, Luzon, Philippines
NAG	Nagoya, Honshu, Japan	PJG	Potts Junction, Guam, Mariana Islands
NAH	Naha, Ryukyu Islands, Japan	PKI	Phulchoki, Nepal
NAI	Noirobi, Kenya	PKR	P.K. Le Roux Dam, Orange Free State, South Africa
NAU	Nonutara, Western Australia, Australia	PLD	Plovdiv, Bulgaria
NAV	Narrows, Virginia, U.S.A.	PLDF	La Plantade, Auvergne, France
NC3	Norsar Array Site 03C00, Norway	PLM	Polomar, California, U.S.A.
NDI	New Delhi (Delhi), Delhi, India	PLP	Palo, Leyte, Philippines
NED	Newark, Delaware, U.S.A.	PME	Palmer East, Alaska, U.S.A.
NEM	Nemuro, Hokkaido, Japan	PMG	Port Moresby, New Guinea, Papua New Guinea
NEW	Newport, Washington, U.S.A.	PMP	Pampeii, Campania, Italy
NGN	Nogano, Honshu, Japan	PMR	Palmer, Alaska, U.S.A.
NGO	Nago, Ryukyu Islands, Japan	PMS	Palmer South (Arctic Valley), Alaska, U.S.A.
NGS	Nagasaki, Kyushu, Japan	PNL	Peninsula, Alaska, U.S.A.
NII	Niigata, Honshu, Japan	PNT	Penticton, British Columbia, Canada
NJ2	Nanjing, Jiangsu, China (Mainland)	PNY	Plattsburgh, New York, U.S.A.
NKI	Nikolski, Alaska, U.S.A.	POI	Polino, Lazio, Italy
NNA	Nana, Peru		

TABLE 70

Code	Station Name and Geographic Region	Code	Station Name and Geographic Region
P00	Poona, Maharashtra, India	SAM	Somorkond, Uzbek S.S.R., U.S.S.R.
PPE	Popeni, Romania	SAN	Santiago, Santiago, Chile
PP1	Padongpanjang, Sumatra, Indonesia	SAO	San Andreas Geological Observatory, California, U.S.A.
PPL	Puu Pili, Hawaii, U.S.A.	SAP	Sapporo, Hokkaido, Japan
PPR	Puerto Princesa, Palawan, Philippines	SAX	Seentis, Switzerland
PPT	Papeete (Pamitoi), Society Islands, French Polynesia	SBA	Scott Base, Greater Antarctica, Antarctica
PRCM	Roach Canyon, California, U.S.A.	SBB	Saddle Back Butte, California, U.S.A.
PRE	Pretoria, Transvaal, South Africa	SCE	Schlegeis, Austria
PRI	Priest, California, U.S.A.	SCH	Schefferville, Quebec, Canada
PRK	Paraskevi (Lesbos), Greece	SCM	Sheep Creek Mountain, Alaska, U.S.A.
PRM	Parsons Mountain, South Carolina, U.S.A.	SCP	State College, Pennsylvania, U.S.A.
PRNI	Paran, Israel	SDN	Sand Point, Alaska, U.S.A.
PRS	Paraiso, California, U.S.A.	SDV	Santo Domingo, Venezuela
PRU	Pruhonice, Czechoslovakia	SDW	Sidewinder Mine, California, U.S.A.
PRY	Parys, Orange Free State, South Africa	SEK	Senekal, Orange Free State, South Africa
PSI	Prapat, Sumatra, Indonesia	SEM	Semipalatinsk, Kazakh S.S.R., U.S.S.R.
PSN	Preselensis, Bulgaria	SEN	Sendai (Mukaiyama), Hanshu, Japan
PSZ	Piszkesztele, Hungary	SEO	Seoul (Keizyo), South Korea
PT02	Quilmana, Peru	SES	Suffield, Alberta, Canada
PT03	Guadalupe, Peru	SFS	San Fernando, Spain
PT06	Pisco, Peru	SGH	Sud-Ghoubbet, Djibouti
PTCR	Patenciana, Costa Rica	SGH	Sud-Ghoubbet, Djibouti
PTO	Porto (Serro do Pilar), Portugal	SGO	Sicignano, Campania, Italy
PUH	Pauahi, Hawaii, U.S.A.	SHA	Spring Hill, Alabama, U.S.A.
PUL	Pulkovo, R.S.F.S.R., U.S.S.R.	SHE	Shemokha, Azerbaijan S.S.R., U.S.S.R.
PV06	Paradox Valley (Coal Canyon), Colorado, U.S.A.	SHI	Shiraz, Iran
PV07	Paradox Valley (Long Mesa), Colorado, U.S.A.	SHIO	Shillong, Meghalaya, India
PV10	Paradox Valley (South La Sal), Colorado, U.S.A.	SHJ	Shionomisaki (Siomisaki), Honshu, Japan
PVC	Port Vila, Vanuatu Islands	SHK	Shiraki, Honshu, Japan
PVL	Pavlikeni, Bulgaria	SHL	Shillong, Meghalaya, India
PWA	Palmer West (Houston), Alaska, U.S.A.	SHN	Shimonoseki 3 (Shimonoseki), Honshu, Japan
PWH	Polioakeahe Pali, Hawaii, U.S.A.	SHZ	Shizuoka, Honshu, Japan
PWL	Port Wells, Alaska, U.S.A.	SIO	Slick, Oklahoma, U.S.A.
PWLA	Pickwick Lake, Alabama, U.S.A.	SIT	Sitka, Alaska, U.S.A.
PYA	Pyatigorsk, R.S.F.S.R., U.S.S.R.	SJG	San Juan, Puerto Rico
PYM	Petit Puy de Manson, Auvergne, France	SJS	San Jose, Costa Rica
OIZ	Qiongzhong, Guangdong, China (Mainland)	SKLY	Ski Hill Lift, New York, U.S.A.
OPS	Quepos, Costa Rica	SKO	Skopje, Yugoslavia
QUE	Quetta, Pakistan	SKR	Severo-Kurilsk, R.S.F.S.R., U.S.S.R.
OUR	Rumipambo, Ecuador	SLA	San Lorenzo, Salta, Argentina
OZG	Quezaltepeque, Guatemala	SLE	Schleitheim, Switzerland
OZH	Quanzhou, Fujian, China (Mainland)	SLM	Saint Louis, Missouri, U.S.A.
OZO	Quartz Mountain State Park, Oklahoma, U.S.A.	SLR	Silverton, Transvaal, South Africa
RAB	Robaul, New Britain, Papua New Guinea	SMF	Signol de Mont, Bourbonnais, France
RAR	Rarotonga, Cook Islands	SMY	Shemya, Alaska, U.S.A.
RBA	Robot, Morocco	SNA	Sonoe, Greater Antarctica, Antarctica
RBL	Raibl, Friuli-Venezia Giulia, Italy	SNG	Songkhla, Thailand
RDJ	Rio de Janeiro, Rio de Janeiro, Brazil	SNY	Shenyang, Liaoning, China (Mainland)
RDP	Rocco di Papa, Lazio, Italy	SNZD	South Karori, North Island, New Zealand
RES	Resolute, Northwest Territories, Canada	SOB1	Sobradinho (Serra), Bahia, Brazil
REY	Reykjavik, Iceland	SOD	Sodankyla, Finland
RFA	Son Rafael, Mendoza, Argentina	SOF	Sofia, Bulgaria
RHP	Rhoboro Hills, South Island, New Zealand	SOH	Sokhos, Greece
RIM	Rim, Hawaii, U.S.A.	SOP	Sopron, Hungary
RIV	Riverview, New South Wales, Australia	SOR	Sorao, Cuba
RJF	Les Rejaudoux, Limousin, France	SPA	South Pole, Greater Antarctica, Antarctica
RKG	Rocky Gully, Western Australia, Australia	SPC	Skalnote-Pleso, Czechoslovakia
RKT	Rikiteo, Tuamotu Archipelago, French Polynesia	SRA	Son Roman, Costa Rica
RLO	Rose Lookout Tower, Oklahoma, U.S.A.	SRO	Srobovovo, Czechoslovakia
RMJ	Rumoi, Hokkaido, Japan	SRS	Serroi, Greece
RMP	Rome (Monte Parzio Catone), Lazio, Italy	SRY	Shiroyama, Honshu, Japan
RMO	Roma, Queensland, Australia	SSB	Saint Sauveur en Rue, Languedoc, France
RMT	Round Mountain, California, U.S.A.	SSC	Saint Sauveur de Carouges, Normandie, France
RMU	Rainbow Monument, Utah, U.S.A.	SSE	Sheshan, Shanghai, China (Mainland)
ROCH	El Rable, Santiago, Chile	SSF	Saint Soulige, Nivernois, France
ROF	Roppe, Alsace, France	SSR	Susora, Romania
ROG	Rognes, Provence, France	SSS	San Salvador, El Salvador
RRO	Red Rock Canyon, Oklahoma, U.S.A.	STB	Steinbach, Nordrhein-Westfalen, Fed. Rep. of Germany
RSCP	Cumberland Plateau, Tennessee, U.S.A.	STE	Stepanovon, Armenian S.S.R., U.S.S.R.
RSNT	Yellowknife, Northwest Territories, Canada	STJ	Saint John's, Newfoundland, Canada
RSNY	Adirondack, New York, U.S.A.	STK	Stephens Creek, New South Wales, Australia
RSQN	Red Lake, Ontario, Canada	STR	Strasbourg, Alsace, France
RSSD	Black Hills, South Dakota, U.S.A.	STS	Santiago de Compostela, Spain
RTB	Rutbah, Iraq	STU	Stuttgart, Baden-Wurttemberg, Fed. Rep. of Germany
RTCB	Cerro Blanco, San Juan, Argentina	SUF	Sumiainen, Finland
RTLL	Cerro Villicun, San Juan, Argentina	SUR	Sutherland, Cape Province, South Africa
RVR	Riverside, California, U.S.A.	SUT	Suttsu, Hokkaido, Japan
RXF	Rexford, Montana, U.S.A.	SVA	Suva, Fiji
SAG	Saga, Kyushu, Japan	SVO	Savo, Solomon Islands
SAL	Salo, Lombardia, Italy		

TABLE 70

Code	Station Name and Geographic Region	Code	Stat. Name and Geographic Region
SVW	Sparrevahn, Alaska, U.S.A.	UPP	Uppsala, Sweden
SWZ	Schweizer-Reneke, Transvaal, South Africa	UTO	University of Toledo, Ohio, U.S.A.
SXM	Sixmile, Montana, U.S.A.	UTS	Utsunomiya, Honshu, Japan
SYP	Santa Ynez Peak, California, U.S.A.	VAI	Varese, Lombardia, Italy
SZP	Santa, Luzon, Philippines	VAL	Valentia, Eire
TAB	Tabriz, Iran	VAO	Valinhos, Sao Paulo, Brazil
TACH	Talagante, Santiago, Chile	VAY	Valandovo, Yugoslavia
TAT	Taleyama, Hanshu, Japan	VBA	Sierra de la Ventana, Buenos Aires, Argentina
TATO	Taipei, China (Taiwan)	VCA	Vinchino, La Pampa, Argentina
TAU	Tasmania University, Tasmania, Australia	VDL	Val di Lei, Switzerland
TBI	Tubuai, Tubuai Islands, French Polynesia	VDM	Villiers-Adam, Ile de France, France
TBL	Tabele, New Guinea, Papua New Guinea	VDW	Vunindawa, Fiji
TBY	Tarsby, Sweden	VG1	Voghera, Lombardia, Italy
TCA	Tanti, Cordoba, Argentina	VHO	Visto Hermoso, Oaxaca, Mexico
TCF	Taulx Ste. Croix, Marche, France	VIE	Vienna--Hohe Warte (Wien--Hohe Warte), Austria
TCW	Tary Channel, South Island, New Zealand	VIR	Virginia, Orange Free State, South Africa
TCX	Tecpanat, Chiapas, Mexico	VIS	Vishakhapatnam (Andhra, Waltair) Andhra Pradesh, India
TDD	Tadjoura, Djibouti	VKA	Vienna--Kabenzi (Wien--Kabenzi), Austria
TEH	Tehran, Iran	VLR	Valea Ierii, Romania
TEN	Tenerife, Canary Islands, Spain	VLS	Valsamata (Kephallenia), Greece
TEP	Tecpan, Guatemala	VLZ	Valdez, Alaska, U.S.A.
TER	Terranova, Guatemala	VOY	Vojsko, Yugoslavia
TET	Tete, Mozambique	VRI	Vrincioala, Romania
TGI	Taghi Ghambar, Iran	VTS	Vitasho, Bulgaria
THE	Thessaloniki, Greece	VUN	Vunikawai, Fiji
TIA	Taion, Shandong, China (Mainland)	VVO	Vivian, Oklahoma, U.S.A.
TIK	Tiksi, R.S.F.S.R., U.S.S.R.	WAB	Wabag, New Guinea, Papua New Guinea
TIM	Timisoara, Romania	WAJ	Wajima (Wazima), Honshu, Japan
TOO	Tiouine, Morocco	WAM	Wambrook, New South Wales, Australia
TIY	Taiyuan, Shanxi, China (Mainland)	WAR	Warsaw (Warszawa), Poland
TKL	Tuckaleechee Caverns, Tennessee, U.S.A.	WB2	Warromunga Array, Northern Territory, Australia
TKS	Tokushima, Shikoku, Japan	WBN	Warburton, Western Australia, Australia
TBL	Tapalu, Romania	WDC	Whiskeytown Dam, California, U.S.A.
TLL	Talidola Astronomical Observatory, Coquimbo, Chile	WEL	Wellington, North Island, New Zealand
TLO	Toledo, Spain	WES	Westan, Massachusetts, U.S.A.
TLX	Tulancingo, Hidalgo, Mexico	WET	Wettzell, Bayern, Fed. Rep. of Germany
TMA	Tamara, Switzerland	WHA	Wahaula, Hawaii, U.S.A.
TMU	Temuca, Cautin, Chile	WHN	Wuhan, Hubei, China (Mainland)
TNS	Taunus, Hessen, Fed. Rep. of Germany	WIN	Windhoek, Namibia
TOA	Talsana, Alaska, U.S.A.	WIT	Witteveen, Netherlands
TOL	Taledo, Spain	WKY	Wakayama, Honshu, Japan
TOO	Toorangi, Victoria, Australia	WLF	Walferdange, Luxembourg
TOT	Tottori, Hanshu, Japan	WLO	Wilson, Oklahoma, U.S.A.
TOV	El Tocuyo, Venezuela	WMQ	Urumqi (Wulumuchi), Xinjiang, China (Mainland)
TP2	Tecpan 2, Guatemala	WMO	Urumqi (Wulumuchi), Xinjiang, China (Mainland)
TPM	Tepoztlan, Morelos, Mexico	WRA	Warromunga Array, Northern Territory, Australia
TPT	Tiputa, Tuamotu Archipelago, French Polynesia	WTS	Winterswijk, Netherlands
TPZ	Tupiza, Bolivia	WWW	Wewak, New Guinea, Papua New Guinea
TRI	Trieste (Grotta Gigante) Friuli-Venezia Giulia, Italy	XAN	Xian (Hsian), Shaanxi, China (Mainland)
TRN	Trinidad (Saint Augustine) Trinidad, Trinidad and Tobago	XDE	Dent Fell, England, United Kingdom
TRO	Tromsa, Norway	YAK	Yakutsk, R.S.F.S.R., U.S.S.R.
TRT	Treutes, Jowa, Indonesia	YAM	Yamagata, Honshu, Japan
TSI	Tuntungan, Sumatera, Indonesia	YBT	Youssef Ben Tochfine, Morocco
TSK	Tsukuba, Hanshu, Japan	YER	Yerkesik, Turkey
TTA	Totalina, Alaska, U.S.A.	YJA	Yavi, Jujuy, Argentina
TTG	Titograd, Yugoslavia	YKA	Yellowknife Array, Northwest Territories, Canada
TTK	Tokmak, Turkey	YKC	Yellowknife, Northwest Territories, Canada
TUC	Tucson, Arizona, U.S.A.	YKM	Yaak, Montana, U.S.A.
TUH	Tulbagh, Cape Province, South Africa	YLV	Yolova, Turkey
TUL	Tulsa (Oklahoma Geophysical Observatory) Oklahoma, U.S.A.	YOK	Yokahama, Honshu, Japan
TVI	Taveuni, Fiji	YOU	Young, New South Wales, Australia
TWC	Su-ao, China (Taiwan)	YSS	Yuzhno-Sakhalinsk, R.S.F.S.R., U.S.S.R.
TWD	Chia-wan, China (Taiwan)	ZAG	Zagreb (Agram), Yugoslavia
TWF1	Yu-li, Chino (Taiwan)	ZAK	Zakamenesk, R.S.F.S.R., U.S.S.R.
TWG	Pin-lang, China (Taiwan)	ZIH	Zihuatanjo, Guerrero, Mexico
TWK	Hsin-ying, China (Taiwan)	ZOB0	Zongo (La Paz), Bolivia
TWM1	Shau Shan, China (Taiwan)	ZON	Zando, San Juan, Argentina
TWO	Mei-shan, China (Taiwan)	ZST	Bratislava--Zeleznna Studnicka, Czechoslovakia
TWO	Tung-shih, China (Taiwan)	ZUL	Zurich--Lagern, Switzerland
TWZ	Nei-hu (Neifu), China (Taiwan)		
TYS	Tyson Valley, Missouri, U.S.A.		
TZZ	Tabubil, New Guinea, Papua New Guinea		
UAV	Universidad de los Andes (Merida), Venezuela		
UCC	Uccle, Belgium		
UDU	Undu Point, Fiji		
ULC	Ulcinj, Yugoslavia		
UPA	Universidad de Panama, Panama		

Figure 29. Azimuthal equidistant map for geographic subdivision,
Kamchatka – Kuril Islands.

FIRST MOTION FM LOCATIONS
1984–1985
KAMCHATKA-KURIL ISLANDS

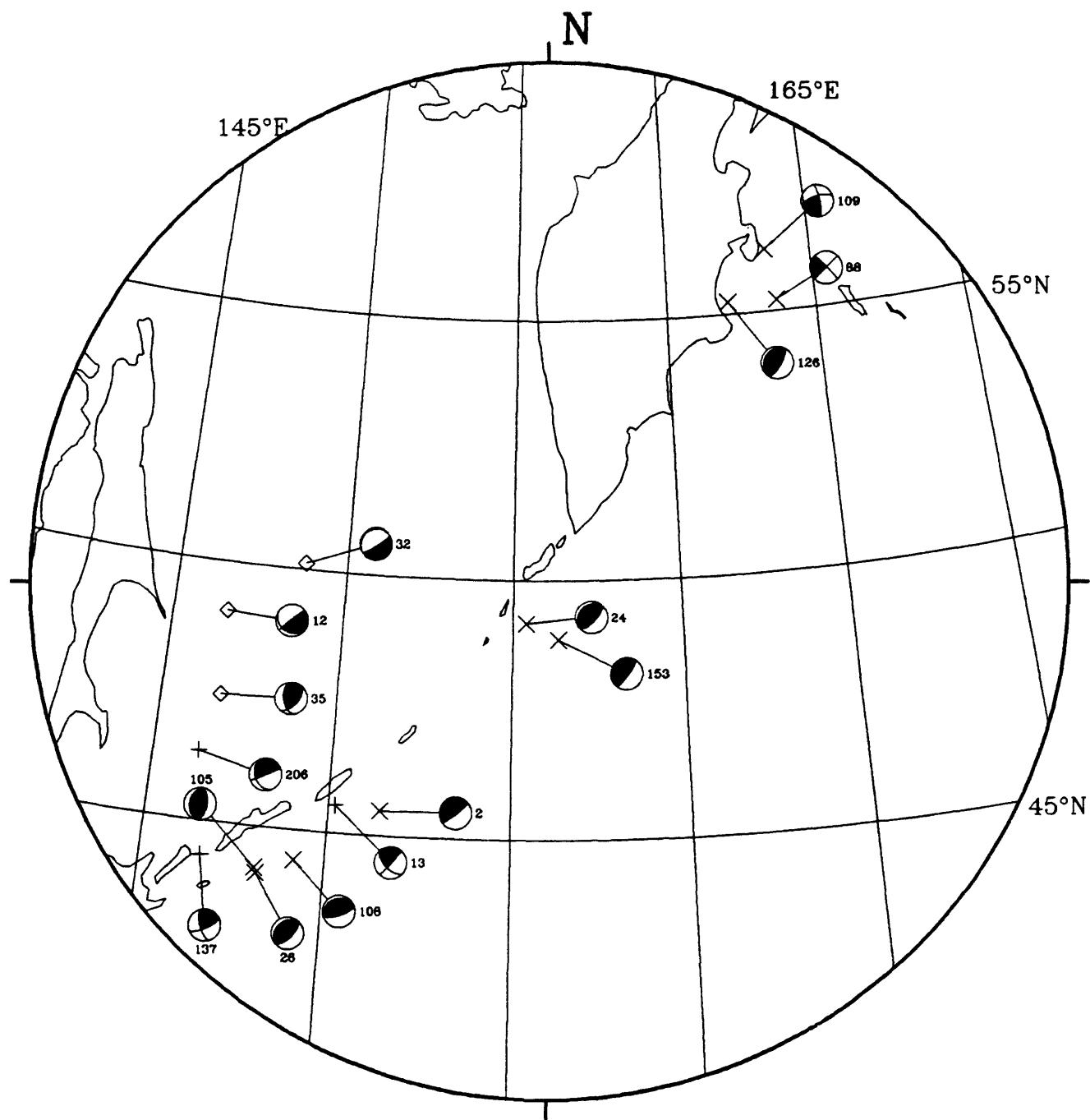


Table 71. Focal mechanism parameters for subdivision,
Kamchatka-Kuril Islands

EVENT #	NODAL PLANE 1 (DEG)			NODAL PLANE 2 (DEG)			T AXIS (DEG)		P AXIS (DEG)		B AXIS (DEG)	
	ϑ	δ	λ	ϑ	δ	λ	PLG	AZM	PLG	AZM	PLG	AZM
4	52	84	90	232	6	90	51	322	39	142	0	52
12	232	82	66	125	25	161	48	117	33	342	24	236
13	135	60	5	42	86	150	24	355	17	93	60	215
24	222	23	90	42	67	90	68	312	22	132	0	42
26	45	65	90	225	25	90	70	315	20	135	0	45
32	58	80	-90	238	10	-90	35	148	55	328	0	58
35	172	50	52	43	53	126	62	15	2	108	28	199
88	315	85	-179	225	89	-5	3	270	4	180	85	34
105	190	35	90	10	55	90	80	280	10	100	0	10
108	72	69	90	252	21	90	66	342	24	162	0	72
109	348	77	27	251	64	165	28	212	9	118	60	12
126	30	70	90	210	20	90	65	300	25	120	0	30
137	165	67	19	67	73	156	29	25	4	117	60	214
153	35	80	90	215	10	90	55	305	35	125	0	36
206	68	88	125	161	35	3	37	9	34	129	35	247

Figure 30. Lower hemisphere focal sphere projection for events 2, 12, 13, and 24.

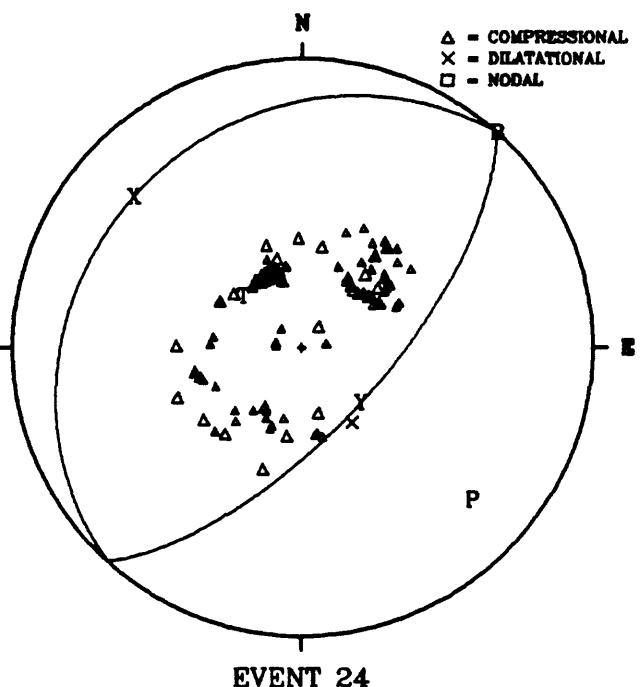
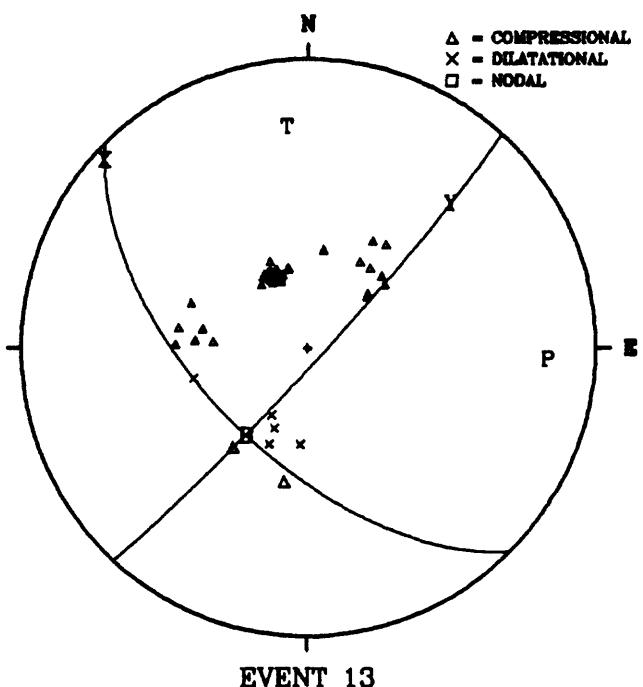
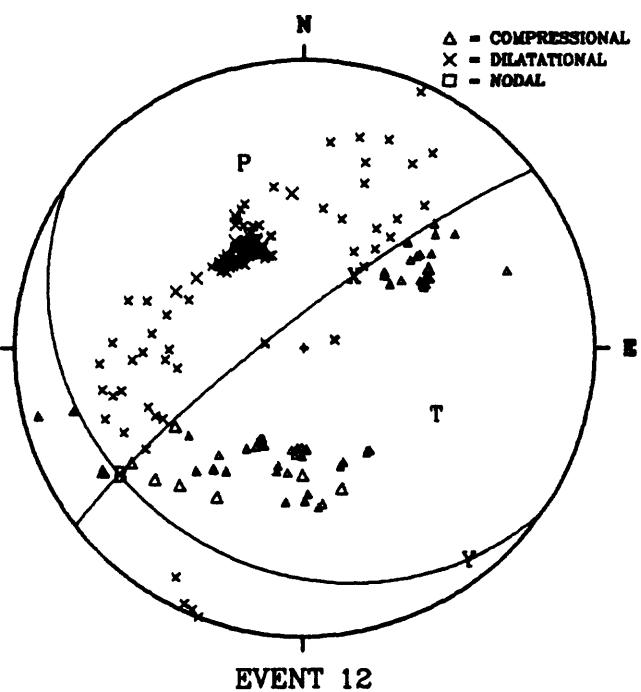
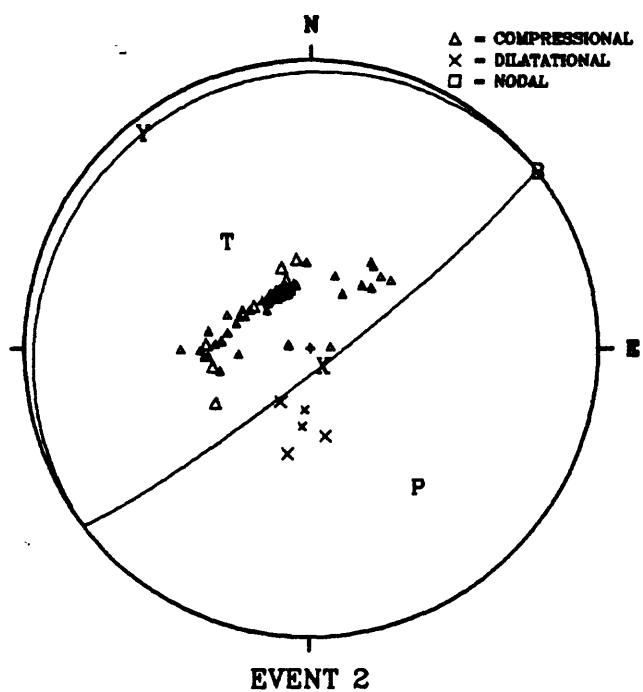


Figure 31. Lower hemisphere focal sphere projection for events 26, 32, 35, and 88.

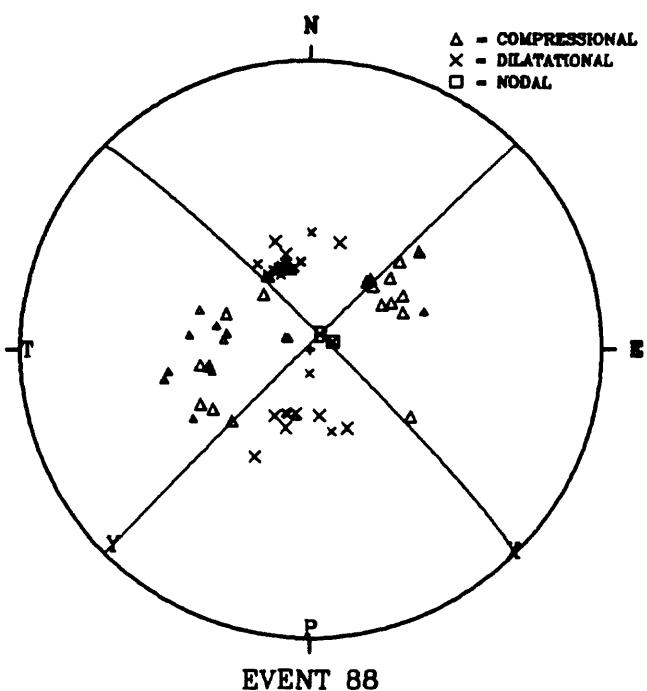
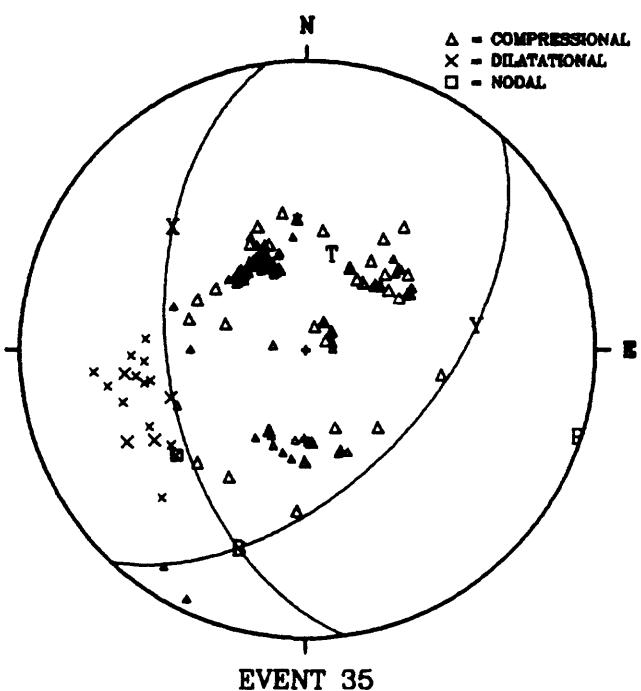
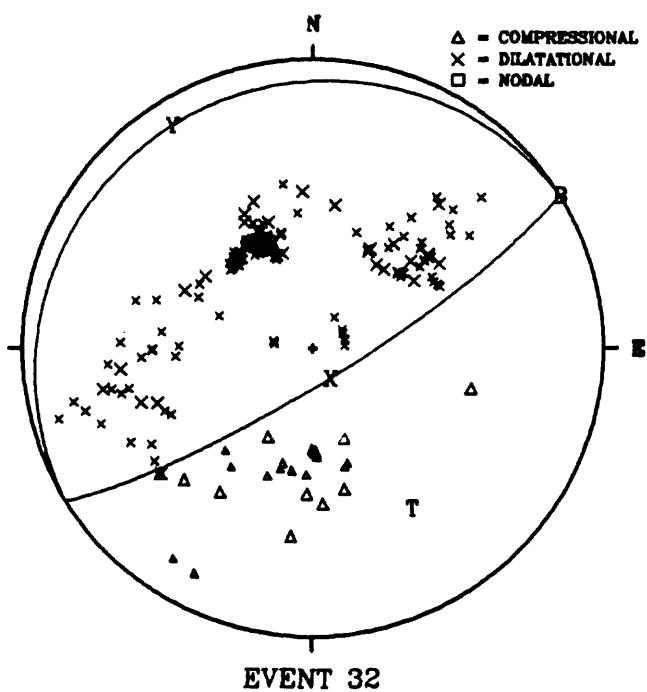
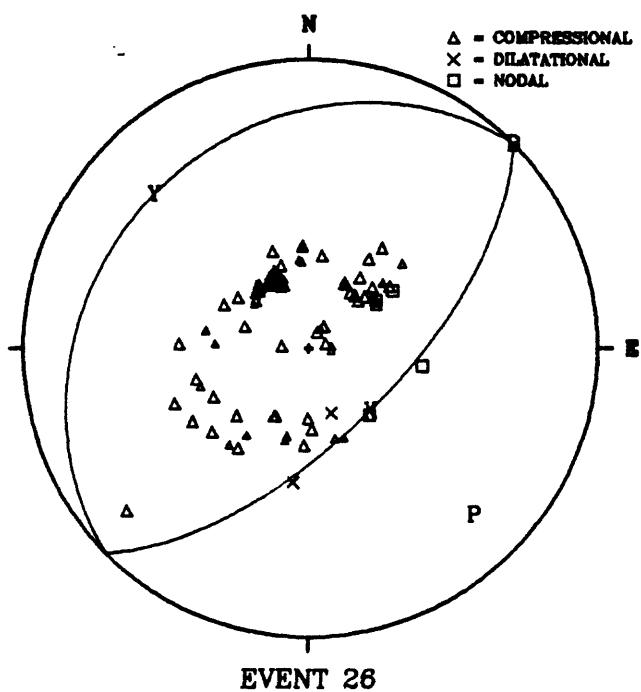
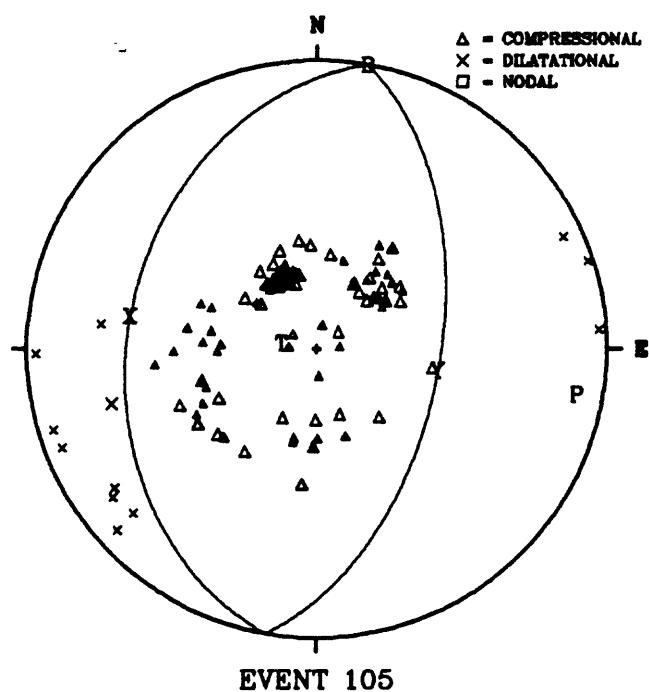
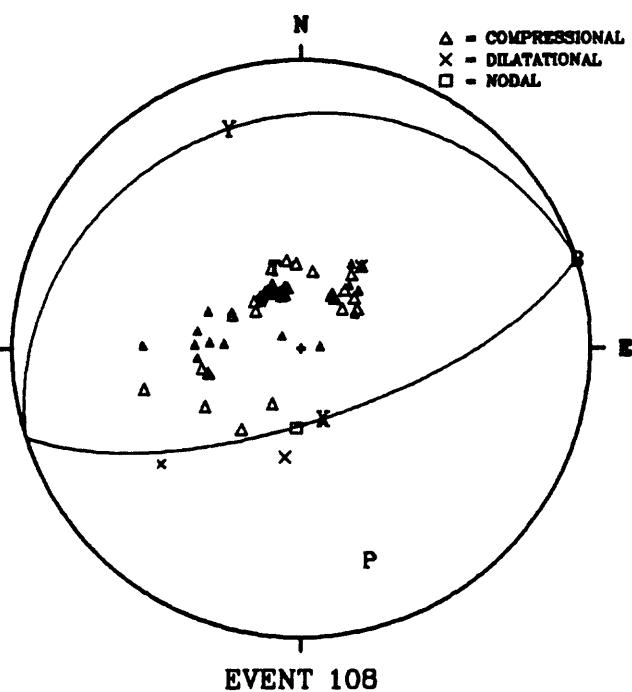


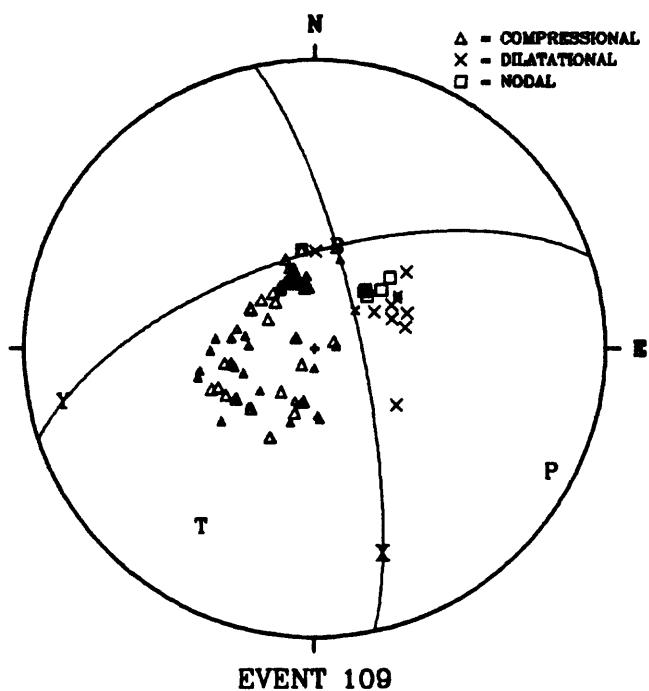
Figure 32. Lower hemisphere focal sphere projection for events 105, 108, 109, and 126.



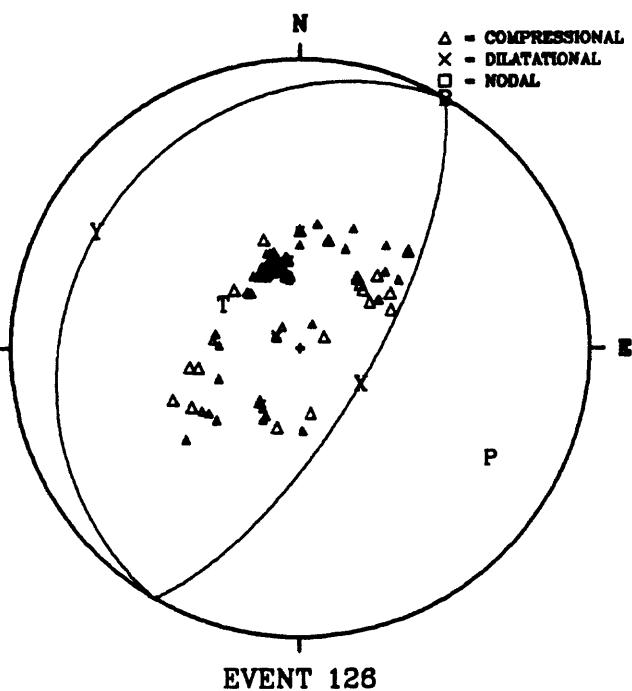
EVENT 105



EVENT 108



EVENT 109



EVENT 126

Figure 33. Lower hemisphere focal sphere projection for events 137, 153, and 206.

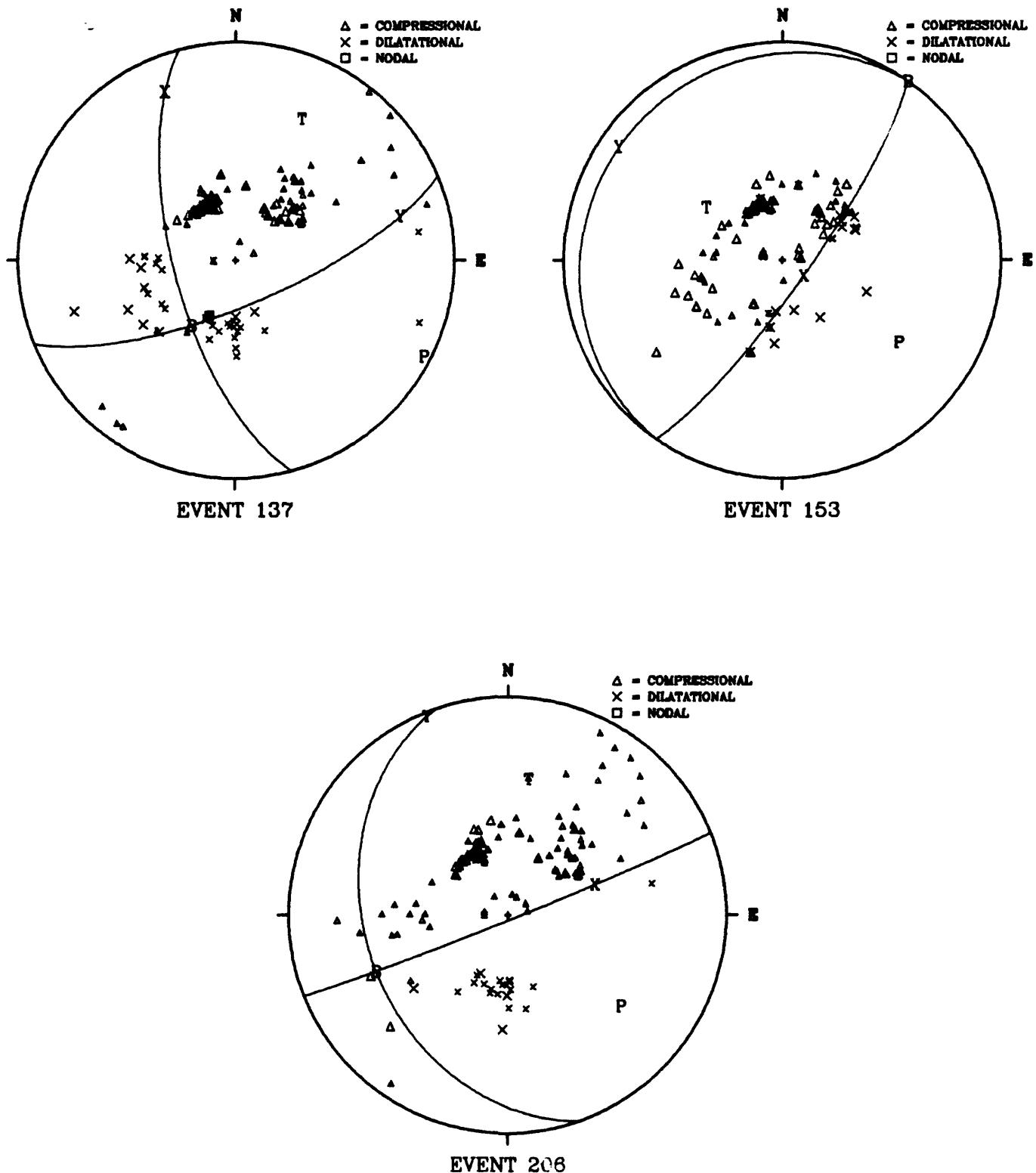


Table 72. Station data for event 2.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
SNY	20.428	269.64	10.33	37.28	I	C	SP P
TIY	29.935	268.91	8.92	31.54	I	C	SP P
TATO	31.593	239.80	8.79	31.03	I	C	LP P
GUMO	32.264	191.99	8.72	30.75	E	D	LP P
XAN	34.237	265.61	8.62	30.36	I	C	SP P
IMA	35.535	35.06	8.53	30.01	I	C	SP P
KDC	35.881	49.41	8.50	29.90	I	C	SP P
LZH	36.756	272.32	8.45	29.70	I	C	LP P
COL	37.896	37.32	8.38	29.43	I	C	SP P
FBA	37.896	37.32	8.38	29.43	I	C	SP P
GTA	38.013	279.62	8.38	29.43	I	C	SP P
CD2	39.599	265.34	8.30	29.12	I	C	SP P
PCA	41.832	44.29	8.16	28.59	I	C	SP P
KMI	43.848	259.33	8.05	28.17	E	C	LP P
LSA	49.165	273.04	7.74	26.99	I	C	SP P
CHG	50.672	256.20	7.62	26.54	I	C	SP P
KBS	53.588	351.01	7.38	25.64	I	C	LP P
KSH	54.078	292.27	7.34	25.49	I	C	SP P
KKN	54.429	275.05	7.30	25.35	I	C	SP P
PKI	54.472	274.75	7.30	25.35	I	C	SP P
DMN	54.661	274.99	7.30	25.35	I	C	SP P
HNR	55.186	169.73	7.26	25.20	E	D	LP P
DAG	57.879	357.34	7.04	24.38	I	C	SP P
EDM	58.056	44.89	7.04	24.38	I	C	SP P
KEV	58.152	340.24	7.04	24.38	I	C	LP P
NDI	59.496	281.10	6.92	23.94	I	C	SP P
FFC	62.479	38.82	6.68	23.06	I	C	SP P
CTAO	65.409	185.33	6.44	22.19	I	D	SP P
QUE	65.530	288.76	6.44	22.19	I	C	SP P
MHI	66.440	298.26	6.35	21.86	I	C	LP P
FRB	66.641	18.13	6.35	21.86	I	C	SP P
KHI	68.366	296.97	6.19	21.28	I	C	LP P
KONO	70.661	340.56	6.03	20.71	I	C	LP P
KOD	71.524	265.82	5.96	20.46	I	C	SP P
IR7	72.218	302.90	5.92	20.31	I	C	SP P
TAB	73.043	307.18	5.85	20.06	E	C	LP P
COP	73.450	337.18	5.82	19.96	I	C	SP P
KRA	75.949	330.14	5.65	19.35	I	C	SP P
CLI	76.017	323.93	5.65	19.35	I	C	SP P
PPE	76.144	323.53	5.65	19.35	I	C	SP P
KVT	76.281	315.32	5.61	19.21	I	C	SP P
SPC	76.570	329.48	5.61	19.21	I	C	SP P
JOS	77.045	328.93	5.58	19.10	I	C	SP P
CVO	77.061	324.12	5.58	19.10	I	C	SP P
CLL	77.130	334.70	5.58	19.10	I	C	SP P
BRG	77.225	333.95	5.58	19.10	I	C	SP P
TLB	77.267	322.28	5.55	18.99	I	C	SP P
ESK	77.319	345.45	5.55	18.99	I	C	SP P
MLR	77.423	324.06	5.55	18.99	I	C	SP P
ISR	77.459	323.49	5.55	18.99	I	C	SP P

Table 72. Station data for event 2 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
PSZ	77.764	328.98	5.52	18.89	I	C	SP	P
PRU	77.811	333.16	5.52	18.89	I	C	SP	P
MOX	78.130	335.17	5.52	18.89	I	C	SP	P
COZ	78.217	324.89	5.52	18.89	I	C	SP	P
WTS	78.246	338.54	5.52	18.89	I	C	SP	P
HOF	78.347	334.86	5.49	18.78	I	C	SP	P
BUD	78.447	329.25	5.49	18.78	I	C	SP	P
VKA	78.723	331.25	5.49	18.78	I	C	SP	P
KHC	78.866	333.29	5.45	18.64	I	C	SP	P
WET	79.073	333.71	5.45	18.64	I	C	SP	P
BNS	79.089	337.89	5.45	18.64	I	C	SP	P
GRF	79.095	334.95	5.45	18.64	I	C	SP	P
DMU	79.298	347.15	5.41	18.50	I	C	SP	P
ENN	79.595	338.54	5.41	18.50	I	C	SP	P
KMR	79.630	332.44	5.41	18.50	I	C	LP	P
GPA	79.658	318.26	5.41	18.50	I	C	SP	P
IST	79.665	319.53	5.41	18.50	I	C	LP	P
DLE	79.831	346.77	5.37	18.35	I	C	SP	P
BHG	80.328	333.03	5.31	18.14	I	C	SP	P
FUR	80.436	334.20	5.31	18.14	I	C	SP	P
KBA	80.745	332.43	5.31	18.14	I	C	SP	P
GWF	80.773	336.78	5.26	17.97	I	C	SP	P
BUH	80.877	336.28	5.26	17.97	I	C	SP	P
DST	80.984	318.88	5.26	17.97	I	C	SP	P
MNT	81.061	30.25	5.26	17.97	I	C	SP	P
GAP	81.115	334.01	5.26	17.97	I	C	SP	P
RBL	81.231	331.99	5.26	17.97	I	D	SP	P
CEY	81.559	331.12	5.22	17.82	I	C	SP	P
SLE	81.623	335.72	5.22	17.82	I	C	LP	P
OGA	81.670	333.76	5.22	17.82	I	C	SP	P
SAX	81.838	334.97	5.18	17.68	I	C	LP	P
ZUL	81.911	335.66	5.18	17.68	I	C	LP	P
OSS	82.103	334.22	5.18	17.68	I	C	LP	P
SKO	82.170	324.77	5.18	17.68	I	C	SP	P
LLS	82.286	335.02	5.14	17.54	I	C	LP	P
VDL	82.488	334.55	5.14	17.54	I	C	LP	P
ELL	82.654	316.33	5.14	17.54	I	C	SP	P
TOO	82.832	184.74	5.12	17.47	I	D	SP	P
TMA	83.011	334.76	5.12	17.47	I	C	LP	P
YER	83.126	317.61	5.12	17.47	I	C	SP	P
MMK	83.330	335.32	5.09	17.37	I	C	LP	P
DIX	83.465	335.68	5.09	17.37	I	C	LP	P
GRC	83.525	338.93	5.09	17.37	I	C	SP	P
LPF	83.808	341.81	5.05	17.23	I	C	SP	P
NWAQ	83.959	208.37	5.05	17.23	I	D	LP	P
ALP	84.448	330.23	5.02	17.12	I	C	SP	P
LSF	84.885	339.54	4.99	17.01	I	C	SP	P
AQU	84.884	330.14	4.99	17.01	I	C	SP	P
MNS	85.106	330.63	4.99	17.01	I	C	SP	P
ORI	85.778	327.00	4.91	16.73	I	C	SP	P

Table 72. Station data for event 2 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
FRF	85.985	335.14	4.91	16.73	I	C	SP P
CAF	85.988	338.71	4.91	16.73	I	C	SP P
HLW	87.387	311.19	4.80	16.35	I	C	SP P
MTD	122.626	279.34	1.87	6.29	I	C	SP PKP
KRI	124.024	280.86	1.87	6.29	I	C	SP PKP
BUL	126.968	278.70	1.86	6.27	I	C	SP PKP
PEL	145.553	83.96	1.66	5.60	I	C	SP PKP

Table 73. Station data for event 12.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ABJ	5.293	198.35	8.44	122.64	I	D	SP	P
NEM	5.778	187.29	8.77	118.94	I	D	SP	P
ASA	6.043	210.40	8.93	116.98	I	D	SP	P
KUS	6.275	194.90	9.06	115.29	I	D	SP	P
OBI	6.576	202.14	9.21	113.20	I	D	SP	P
SAP	7.030	213.29	9.39	110.34	I	D	SP	P
MRK	10.133	204.48	10.00	93.07	I	D	SP	P
OFU	10.592	201.08	10.02	90.00	I	D	SP	P
SEN	11.554	202.94	10.01	88.08	I	D	SP	P
YAM	11.707	204.95	10.01	87.27	I	D	SP	P
MDJ	12.456	255.48	9.96	84.10	I	C	SP	P
MAT	13.932	209.18	9.86	79.69	I	D	SP	P
SNY	17.653	254.48	9.50	71.52	I	C	SP	P
SEO	18.269	238.36	9.44	70.48	E	C	LP	P
ADK	23.387	69.05	8.99	63.76	I	C	SP	P
TIA	25.020	250.17	8.84	61.96	I	D	SP	P
SSE	26.262	236.28	8.76	60.94	E	C	LP	P
BTO	27.066	265.68	8.71	60.38	I	D	SP	P
TIY	27.068	258.12	8.71	60.38	I	D	SP	P
WHN	30.589	244.75	8.51	58.13	I	D	SP	P
ANP	30.847	228.49	8.50	58.04	E	C	LP	P
XAN	31.569	255.78	8.46	57.59	I	D	SP	P
GTA	34.387	271.65	8.30	55.92	I	D	SP	P
KDC	36.178	52.56	8.21	55.06	I	C	SP	P
GZH	36.847	237.34	8.17	54.64	I	D	SP	P
CD2	36.910	256.66	8.17	54.60	I	D	SP	P
COL	37.150	40.05	8.15	54.49	I	D	SP	P
BAG	38.844	222.15	8.07	53.66	E	C	LP	P
WMQ	40.037	285.52	8.01	53.09	I	D	SP	P
PCA	41.641	46.20	7.92	52.27	I	C	SP	P
MBC	43.932	20.13	7.80	51.11	I	D	SP	P
SIT	45.171	48.93	7.70	50.22	I	C	SP	P
DAV	45.434	209.97	7.68	50.03	E	C	LP	P
LSA	45.900	266.20	7.65	49.78	I	D	SP	P
CHG	48.609	248.92	7.44	47.99	I	D	SP	P
KBS	49.498	349.57	7.37	47.38	I	D	SP	P
KSH	49.778	286.96	7.36	47.25	I	D	SP	P
KKM	49.971	221.05	7.34	47.15	I	C	SP	P
NST	50.305	245.16	7.32	46.92	I	D	SP	P
KKN	51.020	268.87	7.26	46.45	I	D	SP	P
PKI	51.081	268.56	7.26	46.41	I	D	SP	P
DMN	51.255	268.83	7.25	46.34	I	D	SP	P
KVG	51.551	174.63	7.23	46.18	I	C	SP	P
YKC	51.721	35.78	7.22	46.08	I	D	SP	P
PHC	52.366	53.23	7.17	45.71	I	C	SP	P
NNT	52.969	243.16	7.12	45.32	I	D	SP	P
RAB	53.252	173.05	7.11	45.20	I	C	SP	P
KEV	53.629	337.91	7.08	44.99	I	D	SP	P
DAG	54.104	355.88	7.04	44.68	E	D	LP	P
TZZ	54.302	186.59	7.03	44.61	I	C	SP	P

Table 73. Station data for event 12 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SOD	55.435	335.97	6.96	43.98	I	D	SP	P
LAT	55.476	179.51	6.95	43.95	I	C	SP	P
NDI	55.722	275.62	6.93	43.81	I	D	SP	P
BKB	56.289	216.51	6.89	43.43	I	C	SP	P
SNG	56.832	238.47	6.85	43.16	E	C	LP	P
PNT	57.249	50.94	6.82	42.93	I	C	SP	P
KJF	57.440	332.95	6.81	42.80	E	D	LP	P
EDM	57.814	44.40	6.78	42.57	I	C	SP	P
COR	58.265	57.17	6.74	42.29	I	C	LP	P
KUPN	58.893	178.17	6.69	41.89	I	C	SP	P
MKS	58.998	211.98	6.68	41.83	I	C	SP	P
SUF	59.013	332.39	6.68	41.83	I	D	SP	P
NEW	59.193	50.66	6.67	41.73	I	C	SP	P
HNR	59.411	164.65	6.66	41.65	I	C	LP	P
KGM	59.670	232.53	6.64	41.51	I	C	SP	P
FHC	60.315	60.91	6.59	41.11	I	C	SP	P
GDH	61.082	8.05	6.53	40.65	I	D	SP	P
NUR	61.165	331.35	6.52	40.60	I	D	LP	P
WDC	61.289	60.27	6.51	40.52	I	C	SP	P
QUE	61.366	283.96	6.50	40.47	I	D	SP	P
FCC	61.649	31.09	6.48	40.30	I	D	SP	P
FFC	61.704	37.83	6.48	40.27	I	D	SP	P
MHI	61.912	293.86	6.46	40.14	I	D	LP	P
MIN	61.978	59.93	6.45	40.10	I	C	SP	P
HYB	62.682	265.27	6.40	39.68	I	D	SP	P
BUT	63.010	50.19	6.37	39.49	I	C	SP	P
LRM	63.199	50.29	6.36	39.38	I	C	SP	P
BKS	63.272	62.36	6.35	39.33	I	C	SP	P
UPP	63.805	334.06	6.31	39.02	I	D	SP	P
TRT	63.865	218.07	6.30	38.98	I	C	SP	P
FRB	64.196	16.52	6.28	38.79	I	D	SP	P
JAS	64.265	61.22	6.27	38.74	I	C	SP	P
POO	64.969	269.73	6.22	38.41	I	D	SP	P
MNA	65.236	59.47	6.20	38.26	I	C	SP	P
FRI	65.343	61.55	6.19	38.19	I	C	SP	P
PRI	65.373	62.81	6.19	38.17	I	C	SP	P
KONO	66.140	337.74	6.13	37.73	I	D	SP	P
BER	66.496	340.19	6.10	37.52	I	D	SP	P
TAB	68.290	303.28	5.98	36.63	I	D	LP	P
KOD	68.675	260.85	5.95	36.44	I	D	SP	P
CTA	68.829	180.34	5.94	36.38	I	C	LP	P
COP	68.829	334.16	5.94	36.38	I	D	SP	P
WAR	68.984	327.60	5.93	36.31	E	D	LP	P
MUD	69.050	336.28	5.93	36.28	I	D	SP	P
WB2	69.547	192.29	5.89	36.00	I	C	SP	P
ISQ	69.735	187.02	5.88	35.91	I	C	SP	P
SHI	70.731	293.09	5.81	35.48	I	D	SP	P
KOU	71.075	162.48	5.79	35.28	I	C	SP	P
KRA	71.175	326.88	5.78	35.23	I	D	SP	P
BRN	71.423	331.99	5.77	35.14	I	D	SP	P

Table 73. Station data for event 12 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KVT	71.430	311.68	5.77	35.13	I	D	SP	P
HAM	71.483	334.36	5.76	35.11	I	D	SP	P
LHC	71.599	35.53	5.75	35.06	I	D	SP	P
SPC	71.785	326.19	5.74	34.99	I	D	SP	P
KSP	71.780	329.39	5.75	35.00	I	D	SP	P
NDF	71.950	149.06	5.73	34.92	I	C	SP	P
KRO	72.215	147.08	5.71	34.78	I	C	SP	P
CVO	72.215	320.70	5.71	34.79	I	D	SP	P
JOS	72.252	325.62	5.71	34.75	I	D	SP	P
CLL	72.446	331.52	5.70	34.65	I	D	SP	P
BRG	72.524	330.75	5.69	34.61	I	D	LP	P
MLR	72.577	320.63	5.69	34.58	I	D	SP	P
SVA	72.628	148.26	5.68	34.56	I	C	SP	P
WIT	72.964	335.87	5.66	34.42	I	D	SP	P
PSZ	72.972	325.66	5.66	34.42	I	D	SP	P
PSN	73.067	318.15	5.66	34.38	I	D	SP	P
PRU	73.093	329.93	5.66	34.37	I	D	SP	P
NOU	73.220	160.82	5.65	34.32	I	C	SP	P
ASPA	73.272	192.14	5.64	34.30	I	C	SP	P
MOX	73.457	331.97	5.63	34.22	I	D	LP	P
KDE	73.486	314.65	5.63	34.21	I	D	SP	P
DEV	73.499	322.68	5.63	34.20	I	C	SP	P
BUD	73.659	325.92	5.62	34.14	I	D	SP	P
WTS	73.660	335.41	5.62	34.13	I	D	SP	P
HOF	73.666	331.65	5.62	34.13	I	D	SP	P
VKA	73.968	327.96	5.60	34.01	I	D	SP	P
DBN	74.003	336.41	5.60	33.99	I	D	LP	P
KHC	74.151	330.04	5.59	33.93	I	D	SP	P
ANMO	74.226	54.75	5.59	33.90	I	C	SP	P
WET	74.366	330.47	5.58	33.84	I	C	SP	P
GRF	74.416	331.72	5.58	33.82	I	D	SP	P
BNS	74.485	334.72	5.57	33.79	I	D	SP	P
DMK	74.742	317.25	5.56	33.69	I	C	SP	P
TNS	74.782	333.62	5.55	33.67	I	D	SP	P
PVL	74.800	319.66	5.55	33.66	I	D	SP	P
IST	74.802	316.00	5.55	33.66	I	D	LP	P
KOE	74.810	334.14	5.55	33.66	I	D	SP	P
KMR	74.897	329.16	5.55	33.62	I	D	LP	P
STB	74.910	334.75	5.55	33.62	I	D	SP	P
DMU	75.009	344.13	5.54	33.58	I	D	SP	P
KLL	75.012	335.09	5.54	33.58	I	D	SP	P
ENN	75.010	335.37	5.54	33.58	I	D	SP	P
BGG	75.119	334.28	5.53	33.53	I	D	SP	P
DDK	75.393	343.64	5.52	33.42	I	D	SP	P
UCC	75.402	336.32	5.52	33.42	I	D	LP	P
DLE	75.526	343.72	5.51	33.36	I	D	SP	P
DCN	75.605	344.18	5.50	33.33	I	D	SP	P
BHG	75.607	329.74	5.50	33.33	I	D	SP	P
FUR	75.740	330.93	5.50	33.28	I	D	SP	P
STU	75.853	332.49	5.49	33.24	I	D	LP	P

Table 73. Station data for event 12 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ALT	75.866	314.05	5.49	33.23	I	D	SP	P
KDZ	75.948	318.65	5.48	33.19	I	D	SP	P
DOU	75.979	335.87	5.48	33.18	I	D	LP	P
KBA	76.011	329.13	5.48	33.16	I	D	SP	P
VTS	76.079	320.57	5.48	33.13	I	D	SP	P
DST	76.120	315.34	5.47	33.11	I	D	SP	P
GWF	76.138	333.54	5.47	33.10	I	D	SP	P
BUH	76.230	333.03	5.46	33.05	I	D	SP	P
GAP	76.414	330.73	5.45	32.94	I	D	SP	P
RBL	76.489	328.67	5.44	32.90	I	D	SP	P
NAU	76.483	209.41	5.44	32.91	I	C	SP	P
MMB	76.689	319.64	5.43	32.81	I	D	SP	P
CDF	76.747	333.50	5.42	32.79	I	D	SP	P
CEY	76.801	327.78	5.43	32.80	I	D	SP	P
OGA	76.963	330.45	5.41	32.72	I	D	SP	P
SRS	77.135	319.46	5.40	32.61	I	D	SP	P
SKO	77.329	321.32	5.37	32.42	I	D	SP	P
HAU	77.384	333.89	5.36	32.38	I	D	SP	P
KNT	77.393	319.93	5.36	32.37	I	D	SP	P
VAY	77.400	320.23	5.36	32.37	I	D	SP	P
BSF	77.411	333.53	5.36	32.36	I	D	SP	P
PRK	77.487	316.63	5.35	32.30	I	D	SP	P
IZM	77.722	315.48	5.33	32.13	I	D	SP	P
GRG	77.773	320.13	5.32	32.10	I	D	SP	P
ELL	77.797	312.75	5.32	32.08	I	D	SP	P
THE	77.803	319.58	5.32	32.08	I	D	SP	P
TTG	77.825	322.96	5.32	32.06	I	D	SP	P
PAIG	78.078	318.71	5.29	31.90	I	D	SP	P
SAL	78.239	330.16	5.28	31.81	I	D	SP	P
LIT	78.446	319.58	5.27	31.71	I	D	SP	P
FLN	78.504	338.46	5.26	31.68	I	D	SP	P
LDF	78.574	338.17	5.25	31.64	I	D	SP	P
KZN	78.580	320.17	5.25	31.64	I	D	SP	P
LOR	78.759	335.13	5.24	31.54	I	D	SP	P
TUL	78.919	47.14	5.23	31.45	I	C	SP	P
GRC	78.949	335.64	5.22	31.44	I	D	SP	P
GRR	78.943	338.56	5.23	31.44	I	D	SP	P
ORO	79.036	331.79	5.22	31.39	I	D	SP	P
SSF	79.045	335.27	5.22	31.39	I	D	SP	P
RLO	79.081	46.47	5.21	31.37	I	C	SP	P
GBO	79.258	46.77	5.20	31.26	I	C	SP	P
LPF	79.320	338.55	5.19	31.23	I	D	SP	P
AVF	79.336	335.26	5.19	31.22	I	D	SP	P
SMF	79.333	334.89	5.19	31.23	I	D	SP	P
MEK	79.383	205.36	5.19	31.20	I	C	SP	P
MNT	79.508	27.50	5.18	31.14	I	D	SP	P
FIR	79.612	328.82	5.17	31.09	I	D	SP	P
ATH	79.675	317.57	5.17	31.06	I	D	SP	P
MZF	80.074	335.52	5.15	30.91	I	D	SP	P
POI	80.082	327.14	5.15	30.91	I	D	SP	P

Table 73. Station data for event 12 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
FOG	80.099	324.86	5.14	30.90	I	D	SP	P
AQU	80.109	326.72	5.14	30.90	I	D	SP	P
CMS	80.181	180.66	5.14	30.87	I	C	SP	P
DUI	80.326	325.68	5.13	30.81	I	D	SP	P
LSF	80.326	336.22	5.13	30.81	I	D	SP	P
MNS	80.339	327.22	5.13	30.81	I	D	SP	P
BHO	80.599	47.43	5.11	30.70	I	C	SP	P
STK	80.695	184.31	5.11	30.67	I	C	SP	P
VLS	80.862	319.77	5.10	30.60	I	D	SP	P
ORI	80.959	323.54	5.09	30.56	I	D	SP	P
SGO	80.962	324.56	5.09	30.56	I	D	SP	P
NPS	81.040	314.74	5.09	30.53	I	D	SP	P
RJF	81.204	335.86	5.08	30.46	I	D	SP	P
JCT	81.220	53.17	5.08	30.46	I	C	SP	P
FRF	81.309	331.75	5.07	30.42	I	D	SP	P
ROI	81.323	323.22	5.07	30.41	I	C	SP	P
CAF	81.405	335.36	5.07	30.38	I	D	SP	P
LRG	81.494	331.90	5.06	30.35	I	D	SP	P
LMR	81.557	331.74	5.06	30.32	I	D	SP	P
LFF	81.749	336.24	5.05	30.25	I	D	SP	P
LPO	81.867	335.85	5.04	30.20	I	D	SP	P
KLG	82.586	201.63	5.00	29.91	I	C	SP	P
MLS	83.494	335.26	4.93	29.50	I	D	SP	P
EPF	83.629	335.80	4.92	29.41	I	D	SP	P
BAL	83.670	205.61	4.92	29.39	I	C	SP	P
JAU	83.811	336.29	4.90	29.28	I	C	SP	P
ATE	83.854	336.54	4.89	29.25	I	C	SP	P
ISSF	83.933	336.58	4.89	29.20	I	C	SP	P
ADE	83.942	186.50	4.89	29.19	I	C	SP	P
CAN	84.029	178.02	4.88	29.14	I	C	SP	P
ERC	84.190	325.18	4.86	29.05	I	D	SP	P
KLB	84.307	204.43	4.86	28.99	I	C	SP	P
BLA	84.527	35.92	4.84	28.88	I	D	SP	P
WAM	84.896	178.14	4.82	28.73	I	C	SP	P
LGR	84.905	337.56	4.82	28.73	I	D	SP	P
MUN	85.102	205.56	4.81	28.67	I	C	SP	P
NWAQ	85.710	204.42	4.78	28.49	I	C	SP	P
BFD	85.928	183.24	4.76	28.40	I	C	SP	P
TOO	86.253	180.88	4.75	28.31	I	C	SP	P
RKG	86.849	204.23	4.73	28.15	I	C	SP	P
TOL	87.720	337.81	4.71	28.04	I	D	SP	P
PRL	89.044	340.08	4.69	27.91	I	D	SP	P
MTH	89.840	341.33	4.67	27.82	I	D	SP	P
CRT	90.146	336.61	4.67	27.76	I	D	SP	P
MTD	118.846	277.63	1.87	10.78	I	D	SP	PKP
KRI	120.163	279.18	1.87	10.77	I	D	SP	PKP
BUL	123.212	277.34	1.87	10.74	I	D	SP	PKP
ROCH	147.782	74.18	1.60	9.21	I	D	SP	PKP
LNV	148.166	75.99	1.59	9.15	I	D	SP	PKP
SAN	148.318	74.50	1.59	9.12	I	D	SP	PKP

Table 74. Station data for event 13.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
GUMO	32.151	189.73	8.71	39.10	E	C	LP P
LZH	35.881	271.41	8.48	37.87	I	C	SP P
GTA	37.143	278.86	8.40	37.48	I	C	SP P
COL	38.383	37.36	8.33	37.08	I	C	SP P
WMQ	43.464	291.05	8.05	35.67	I	C	SP P
INK	43.773	31.48	8.03	35.57	I	C	SP P
DAV	43.819	216.63	8.03	35.56	I	C	LP P
CHTO	49.840	255.10	7.65	33.61	I	D	SP P
CHG	49.840	255.10	7.65	33.61	I	D	SP P
KKN	53.554	274.18	7.35	32.14	I	C	SP P
PKI	53.597	273.88	7.34	32.13	I	C	SP P
DMN	53.787	274.12	7.33	32.05	I	C	SP P
NDI	58.629	280.29	6.96	30.27	I	C	SP P
MTN	60.593	201.43	6.80	29.52	I	D	SP P
SES	61.465	46.06	6.73	29.18	I	C	SP P
FFC	62.982	38.31	6.61	28.61	I	C	SP P
FCC	63.396	31.67	6.58	28.45	I	C	SP P
LRM	63.562	50.77	6.57	28.39	I	C	SP P
GDH	64.211	9.16	6.51	28.15	I	C	SP P
GDH	64.211	9.16	6.51	28.15	I	C	SP P
CTA	65.391	184.05	6.42	27.70	I	D	SP P
POO	67.520	273.88	6.24	26.86	I	C	SP P
UPP	68.036	336.36	6.20	26.67	I	C	SP P
WBN	74.484	201.93	5.73	24.52	I	D	SP P
KRA	75.464	329.44	5.66	24.21	I	C	SP P
KSP	76.055	331.91	5.63	24.04	I	C	SP P
JOS	76.545	328.21	5.60	23.91	I	C	SP P
CLL	76.704	333.99	5.59	23.87	I	C	SP P
BRG	76.789	333.24	5.58	23.85	I	C	SP P
WIT	77.169	338.27	5.56	23.73	I	C	SP P
PSZ	77.264	328.25	5.55	23.69	I	C	SP P
MOX	77.710	334.45	5.52	23.55	I	C	SP P
WTS	77.872	337.83	5.51	23.51	I	C	SP P
HOF	77.923	334.14	5.51	23.50	I	C	SP P
KHC	78.422	332.56	5.48	23.36	I	C	SP P
GRF	78.672	334.22	5.46	23.28	I	C	SP P
DMU	79.047	346.42	5.43	23.14	I	C	SP P
ENN	79.222	337.81	5.41	23.08	I	C	SP P
DDK	79.443	345.94	5.40	23.00	I	C	SP P
DLE	79.574	346.04	5.38	22.94	I	C	SP P
DCN	79.642	346.48	5.38	22.91	I	C	SP P
RLO	79.678	48.30	5.37	22.89	I	C	SP P
GBO	79.833	48.61	5.35	22.79	I	C	SP P
KBA	80.289	331.68	5.30	22.57	I	C	SP P
GWF	80.375	336.02	5.29	22.54	I	C	SP P
CDF	80.984	335.98	5.24	22.31	I	C	SP P
BHO	81.120	49.37	5.23	22.26	I	C	SP P
SLE	81.211	334.96	5.22	22.23	E	C	LP P
OGA	81.231	332.99	5.22	22.22	I	C	SP P
ZUL	81.497	334.89	5.20	22.12	E	C	LP P

Table 74. Station data for event 13 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
HAU	81.616	336.38	5.19	22.08	I	C	SP P
SKO	81.618	323.98	5.19	22.08	I	C	SP P
OSS	81.671	333.45	5.19	22.06	E	C	LP P
LLS	81.864	334.24	5.17	21.99	E	C	LP P
VDL	82.060	333.78	5.16	21.92	E	C	LP P
TMA	82.586	333.98	5.13	21.79	E	C	LP P
FLN	82.665	340.92	5.12	21.76	I	C	SP P
LOR	82.974	337.63	5.10	21.68	I	C	SP P
DIX	83.052	334.89	5.10	21.66	E	C	LP P
GRR	83.102	341.02	5.10	21.65	I	C	SP P
GRC	83.157	338.14	5.09	21.64	I	C	SP P
EMS	83.204	335.19	5.09	21.62	E	C	LP P
LBF	83.203	337.44	5.09	21.62	I	C	SP P
SSF	83.258	337.77	5.09	21.61	I	C	SP P
LPF	83.479	341.01	5.07	21.55	I	C	SP P
AVF	83.549	337.76	5.07	21.53	I	C	SP P
SMF	83.552	337.39	5.07	21.53	I	C	SP P
NWAO	83.597	207.40	5.06	21.51	I	D	SP P
NWAO	83.597	207.40	5.06	21.51	I	D	SP P
MZF	84.284	338.03	5.02	21.34	I	C	SP P
MFF	84.612	339.94	5.00	21.24	I	C	SP P
FRF	85.565	334.31	4.94	20.94	I	C	SP P
CAF	85.616	337.89	4.93	20.92	I	C	SP P
CVF	85.760	332.41	4.91	20.81	I	C	SP P
LFF	85.947	338.77	4.89	20.72	I	C	SP P
EPF	87.833	338.36	4.77	20.20	I	C	SP P

Table 75. Station data for event 24.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality	Direction, and Source of Earth Motion	
TTA	29.605	44.01	8.96	39.06	I	C	SP P
IMA	30.954	38.02	8.82	38.34	I	C	SP P
BRW	31.110	27.58	8.82	38.34	I	C	SP P
SSE	31.418	247.67	8.78	38.13	I	C	LP P
KDC	31.470	54.18	8.78	38.13	I	C	SP P
FBA	33.321	40.54	8.65	37.47	I	C	SP P
COL	33.321	40.54	8.65	37.47	I	C	LP P
COL	33.321	40.54	8.65	37.47	I	C	SP P
GUMO	36.528	197.35	8.47	36.56	I	C	LP P
PCA	37.322	48.17	8.41	36.26	I	C	SP P
INK	38.789	34.16	8.32	35.81	I	C	SP P
LZH	39.370	270.43	8.29	35.66	I	C	LP P
MBC	41.794	20.97	8.15	34.97	I	C	SP P
BAG	43.194	233.17	8.10	34.73	E	C	LP P
CNP	44.492	225.39	8.02	34.34	I	C	SP P
RSNT	48.087	38.63	7.81	33.32	I	C	LP P
YKC	48.137	38.60	7.81	33.32	I	C	SP P
DAV	48.879	220.91	7.73	32.93	E	C	LP P
EDM	53.552	48.37	7.37	31.22	I	C	SP P
CHG	54.163	256.83	7.33	31.03	I	C	SP P
CHTO	54.163	256.83	7.33	31.03	I	C	LP P
DAG	54.283	358.34	7.29	30.84	E	C	LP P
NEW	54.518	55.07	7.29	30.84	I	C	SP P
YKM	54.913	53.80	7.25	30.66	I	C	SP P
RXF	55.222	53.51	7.25	30.66	I	C	SP P
LHD	55.358	54.32	7.21	30.47	I	C	SP P
LDM	55.368	54.01	7.21	30.47	I	C	SP P
KEV	55.568	340.68	7.21	30.47	I	C	LP P
CLX	55.614	54.15	7.21	30.47	I	C	SP P
NST	55.746	253.26	7.21	30.47	I	C	SP P
WDC	56.099	65.36	7.18	30.33	I	C	SP P
SES	56.394	50.09	7.14	30.14	I	C	SP P
KHT	57.384	253.92	7.07	29.82	I	C	SP P
FFC	57.912	41.93	7.03	29.63	I	C	SP P
NNT	58.338	251.26	6.99	29.45	I	C	SP P
FCC	58.404	34.96	6.99	29.45	I	C	SP P
LRM	58.537	55.02	6.99	29.45	I	C	SP P
JAS	59.029	66.54	6.96	29.31	I	C	SP P
GDH	59.989	11.48	6.88	28.94	I	C	LP P
FRI	60.091	66.94	6.88	28.94	I	C	SP P
BDW	62.097	56.10	6.72	28.20	I	C	SP P
MKS	62.534	221.18	6.68	28.02	I	C	SP P
RSSD	64.114	51.91	6.55	27.43	I	C	LP P
RSON	64.211	41.12	6.55	27.43	I	C	LP P
UPP	66.041	338.20	6.39	26.71	I	C	SP P
PSI	66.581	245.14	6.35	26.53	I	C	SP P
MHI	67.030	299.21	6.30	26.30	I	C	SP P
MHI	67.030	299.21	6.30	26.30	I	C	LP P
PVC	67.592	166.67	6.26	26.12	I	C	SP P
TRT	67.840	226.59	6.22	25.94	I	C	SP P

Table 75. Station data for event 24 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality	Direction, and Source of Earth Motion
BER	68.141	344.51	6.22	25.94	I	C LP P
HYB	68.459	271.92	6.18	25.76	I	C SP P
AFI	69.188	145.71	6.14	25.58	E	D LP P
ANMO	69.289	60.39	6.10	25.40	I	C LP P
ALQ	69.291	60.39	6.10	25.40	I	C SP P
CTAO	69.420	189.17	6.10	25.40	E	C LP P
CTA	69.420	189.17	6.10	25.40	I	C LP P
KOU	69.865	171.12	6.06	25.23	I	C SP P
SCH	70.510	24.34	6.03	25.09	I	C SP P
POO	70.731	276.20	6.03	25.09	I	C SP P
WB2	71.306	200.88	5.96	24.78	I	C SP P
NOU	71.834	169.22	5.92	24.60	I	C SP P
ACO	72.050	54.52	5.92	24.60	I	C SP P
TAB	72.899	308.69	5.85	24.29	E	C LP P
HAM	73.653	339.31	5.81	24.12	I	C SP P
SIO	74.274	53.36	5.74	23.81	I	C SP P
TUL	74.419	52.92	5.74	23.81	I	C LP P
RLO	74.623	52.25	5.74	23.81	I	C SP P
CLL	74.872	336.61	5.71	23.68	I	C SP P
ASPA	74.997	200.34	5.71	23.68	I	C SP P
BRG	75.020	335.87	5.71	23.68	I	C SP P
JOS	75.201	330.80	5.71	23.68	I	C SP P
FVM	75.532	48.11	5.68	23.54	I	C SP P
GAC	75.649	34.13	5.68	23.54	I	C LP P
MOX	75.837	337.16	5.64	23.37	I	C SP P
MLR	75.941	325.94	5.64	23.37	I	C SP P
DBN	75.970	341.58	5.64	23.37	E	C LP P
BHO	76.076	53.33	5.64	23.37	I	C SP P
HOF	76.075	336.87	5.64	23.37	I	C SP P
DMU	76.227	349.32	5.64	23.37	I	C SP P
JCT	76.357	59.19	5.61	23.24	I	C SP P
MNT	76.495	33.09	5.61	23.24	I	C SP P
ZST	76.534	332.75	5.61	23.24	I	C SP P
BUD	76.576	331.23	5.61	23.24	I	C SP P
BNS	76.607	339.97	5.61	23.24	I	C SP P
DDK	76.657	348.87	5.61	23.24	I	C SP P
KHC	76.703	335.33	5.61	23.24	I	C SP P
VKA	76.706	333.26	5.61	23.24	I	C SP P
VIE	76.708	333.23	5.61	23.24	I	C LP P
DLE	76.781	348.97	5.58	23.11	I	C SP P
GRF	76.814	337.01	5.58	23.11	I	C SP P
GRFO	76.816	337.01	5.58	23.11	I	C LP P
WET	76.879	335.77	5.58	23.11	I	C SP P
RSNY	76.985	34.16	5.58	23.11	I	C LP P
TNS	77.005	338.92	5.58	23.11	I	C SP P
ENN	77.069	340.66	5.58	23.11	I	C SP P
UCC	77.371	341.63	5.55	22.97	E	C LP P
KMR	77.525	334.53	5.55	22.97	I	C LP P
DOU	77.986	341.25	5.52	22.84	I	C LP P
BHG	78.180	335.17	5.52	22.84	I	C SP P

Table 75. Station data for event 24 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
FUR	78.204	336.36	5.52	22.84	I	C	SP P
PVL	78.235	325.18	5.52	22.84	I	C	SP P
JMB	78.279	323.92	5.48	22.67	I	C	SP P
GWF	78.363	338.97	5.48	22.67	I	C	SP P
BUH	78.500	338.48	5.48	22.67	I	C	SP P
KBA	78.637	334.61	5.48	22.67	I	C	SP P
SCP	78.882	38.32	5.45	22.54	I	C	LP P
GAP	78.895	336.22	5.45	22.54	I	C	SP P
CDF	78.973	338.98	5.45	22.54	I	C	SP P
ECH	79.184	338.99	5.45	22.54	I	C	SP P
LJU	79.236	333.41	5.45	22.54	I	C	SP P
WBN	79.256	206.16	5.41	22.36	I	C	SP P
SLE	79.283	337.97	5.41	22.36	E	C	LP P
VTS	79.436	326.18	5.41	22.36	I	C	SP P
VDM	79.441	342.42	5.41	22.36	E	C	LP P
KDZ	79.460	324.28	5.41	22.36	I	C	SP P
OGA	79.466	336.00	5.41	22.36	I	C	SP P
CEY	79.544	333.34	5.41	22.36	I	C	SP P
SAX	79.550	337.23	5.41	22.36	E	C	LP P
HAU	79.571	339.43	5.41	22.36	I	C	SP P
ZUL	79.574	337.93	5.41	22.36	E	C	LP P
BSF	79.630	339.08	5.41	22.36	I	C	SP P
NAU	79.745	217.05	5.41	22.36	I	C	SP P
ROF	79.747	338.96	5.41	22.36	I	C	SP P
TRI	79.765	333.76	5.36	22.15	I	C	SP P
RSCP	79.768	46.40	5.36	22.15	I	C	LP P
OSS	79.866	336.50	5.36	22.15	E	C	LP P
DST	79.889	321.04	5.36	22.15	I	C	SP P
LLS	79.993	337.31	5.36	22.15	E	C	LP P
CTI	80.052	335.27	5.36	22.15	I	C	SP P
MMB	80.118	325.32	5.36	22.15	I	C	SP P
VDL	80.227	336.86	5.36	22.15	E	C	LP P
FLN	80.253	344.07	5.30	21.88	I	C	SP P
LDF	80.351	343.79	5.30	21.88	I	C	SP P
SKO	80.620	327.03	5.30	21.88	I	C	SP P
GRR	80.682	344.21	5.30	21.88	I	C	SP P
TMA	80.734	337.11	5.30	21.88	E	C	LP P
SAL	80.763	335.83	5.26	21.71	I	C	SP P
VAY	80.780	325.96	5.26	21.71	I	C	SP P
BLA	80.806	41.99	5.26	21.71	E	C	LP P
BLA	80.806	41.99	5.26	21.71	I	C	LP P
GEO	80.812	38.81	5.26	21.71	I	C	SP P
LOR	80.823	340.80	5.26	21.71	I	C	SP P
GRC	80.964	341.32	5.26	21.71	I	C	SP P
TTG	80.977	328.69	5.26	21.71	I	C	SP P
MMK	81.013	337.68	5.26	21.71	I	C	LP P
LPF	81.058	344.23	5.26	21.71	I	C	SP P
LBF	81.066	340.63	5.26	21.71	I	C	SP P
SSF	81.095	340.96	5.26	21.71	I	C	SP P
DIX	81.123	338.06	5.26	21.71	E	C	LP P

Table 75. Station data for event 24 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
EMS	81.250	338.37	5.21	21.49	E	C	LP P
AVF	81.385	340.98	5.21	21.49	I	C	SP P
SMF	81.418	340.61	5.21	21.49	I	C	SP P
IZM	81.475	321.31	5.21	21.49	I	C	SP P
MZF	82.096	341.31	5.17	21.32	I	C	SP P
TCF	82.105	341.58	5.17	21.32	I	C	SP P
FIR	82.250	334.63	5.14	21.19	I	C	SP P
MFF	82.271	343.25	5.14	21.19	I	C	SP P
LSF	82.281	342.03	5.14	21.19	I	C	SP P
BRT	83.056	329.38	5.11	21.06	I	C	SP P
MNS	83.116	333.12	5.11	21.06	I	C	SP P
RJF	83.188	341.76	5.11	21.06	I	C	SP P
DUI	83.237	331.60	5.11	21.06	I	C	SP P
LCI	83.290	328.62	5.08	20.93	I	C	SP P
CAF	83.436	341.27	5.08	20.93	I	C	SP P
SGG	83.511	331.54	5.08	20.93	I	C	SP P
RMP	83.637	332.87	5.08	20.93	I	C	SP P
FRF	83.675	337.69	5.08	20.93	I	C	SP P
LFF	83.695	342.18	5.08	20.93	I	C	SP P
CDR	83.784	338.34	5.05	20.80	I	C	SP P
LRG	83.846	337.85	5.05	20.80	I	C	SP P
LPO	83.850	341.80	5.05	20.80	I	C	SP P
LMR	83.922	337.71	5.05	20.80	I	C	SP P
CVF	84.028	335.81	5.05	20.80	I	C	SP P
ADE	85.067	193.68	4.99	20.54	I	C	SP P
KLG	85.152	208.82	4.99	20.54	I	C	SP P
EPF	85.608	341.92	4.96	20.42	I	C	SP P
LGR	86.710	343.80	4.86	19.99	I	C	SP P
KLB	87.114	211.44	4.83	19.86	I	C	SP P
NWAO	88.512	211.31	4.75	19.52	I	C	LP P
TOL	89.489	344.32	4.71	19.34	I	C	LP P
SNZO	91.690	165.56	4.68	19.22	I	C	LP P
TRN	112.223	39.49	1.89	7.64	E	C	LP PKP
BNG	114.795	311.30	1.88	7.61	I	C	SP PKP
SLR	133.070	280.02	1.84	7.41	I	C	SP PKP
SEK	135.266	277.97	1.82	7.36	I	C	SP PKP
GRM	139.188	273.27	1.78	7.20	I	C	SP PKP
SUR	142.357	279.26	1.74	7.02	I	C	SP PKP
PEL	142.424	82.26	1.74	7.02	I	C	SP PKP
RFA	144.878	82.47	1.68	6.80	I	C	SP PKP

Table 76. Station data for event 26.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
MAT	10.732	228.57	13.60	73.42	I	C	LP P
SSE	24.906	247.66	9.46	41.81	E	C	LP P
ANP	28.755	237.73	9.02	39.47	I	C	LP P
GUMO	30.555	186.37	8.85	38.58	E	D	LP P
GUA	30.600	186.28	8.85	38.58	E	D	LP P
LZH	34.514	272.08	8.58	37.20	I	C	LP P
BAG	36.163	228.93	8.49	36.75	I	C	LP P
KDC	38.502	47.80	8.35	36.05	I	C	SP P
MAP	39.652	219.23	8.29	35.75	I	C	SP P
COL	40.360	36.31	8.23	35.45	I	C	LP P
DAV	41.848	214.90	8.15	35.05	I	C	LP P
CHTO	48.108	254.57	7.81	33.39	E	C	LP P
CHG	48.108	254.57	7.81	33.39	I	C	LP P
NST	49.462	250.53	7.69	32.81	I	C	SP P
HON	49.656	99.18	7.69	32.81	E	N	LP P
RSNT	55.096	34.19	7.25	30.72	E	C	LP P
SNG	55.371	242.89	7.21	30.54	I	C	LP P
MKS	55.496	215.50	7.21	30.54	I	C	SP P
NDI	57.488	279.92	7.07	29.88	I	C	SP P
KEV	58.641	339.59	6.99	29.51	E	C	LP P
KEV	58.641	339.59	6.99	29.51	I	C	LP P
DAG	59.114	356.53	6.95	29.33	I	C	SP P
DAG	59.114	356.53	6.95	29.33	I	C	LP P
LON	59.761	52.75	6.88	29.00	E	C	LP P
COR	60.090	55.50	6.88	29.00	E	N	LP P
LHD	62.383	48.57	6.67	28.04	I	C	SP P
LDM	62.397	48.29	6.67	28.04	I	C	SP P
LEM	62.522	226.72	6.67	28.04	I	C	LP P
CLX	62.641	48.43	6.67	28.04	I	C	SP P
CTAO	63.905	182.03	6.55	27.49	E	C	LP P
CTA	63.905	182.03	6.55	27.49	I	C	LP P
PVC	64.242	158.65	6.55	27.49	I	C	SP P
WB2	64.987	194.38	6.47	27.13	I	C	SP P
MHI	65.037	297.01	6.47	27.13	E	C	LP P
GDH	65.822	8.32	6.39	26.76	E	C	LP P
KOU	66.020	163.49	6.39	26.76	I	C	SP P
POO	66.199	273.13	6.39	26.76	I	C	SP P
AFI	68.289	137.76	6.18	25.82	E	N	LP P
ASPA	68.703	194.06	6.18	25.82	I	C	SP P
AKU	70.026	354.01	6.06	25.28	I	C	SP P
RSSD	71.167	46.44	5.99	24.97	E	C	LP P
RSON	71.252	36.19	5.95	24.79	E	C	LP P
BER	71.532	341.57	5.95	24.79	E	C	LP P
REY	71.814	355.45	5.92	24.66	I	C	SP P
TAB	72.004	305.69	5.92	24.66	I	C	LP P
COP	73.779	335.70	5.78	24.04	I	C	SP P
COP	73.779	335.70	5.78	24.04	I	C	LP P
ALQ	76.185	54.67	5.64	23.42	I	C	LP P
ANMO	76.183	54.67	5.64	23.42	E	N	LP P
HAM	76.436	335.83	5.61	23.29	I	C	SP P

Table 76. Station data for event 26 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
KSP	76.622	330.98	5.61	23.29	I	C	SP P
TLB	76.900	320.63	5.58	23.16	I	C	SP P
CLL	77.340	333.04	5.55	23.02	I	C	SP P
BRG	77.400	332.28	5.55	23.02	I	C	LP P
PSN	77.528	319.95	5.55	23.02	I	C	SP P
RIV	77.613	177.47	5.55	23.02	E	C	LP P
CMP	77.709	322.76	5.55	23.02	I	C	SP P
PRU	77.949	331.47	5.52	22.89	I	C	SP P
BUC1	77.994	321.61	5.52	22.89	I	C	SP P
EPT	78.376	57.01	5.48	22.72	I	C	LP P
DBN	78.991	337.78	5.45	22.59	E	C	LP P
KHC	79.009	331.55	5.45	22.59	I	C	SP P
JMB	79.211	320.09	5.45	22.59	I	C	SP P
WET	79.235	331.96	5.45	22.59	I	C	SP P
GRFO	79.315	333.19	5.41	22.41	E	C	LP P
BNS	79.444	336.13	5.41	22.41	I	C	SP P
KMR	79.732	330.66	5.41	22.41	I	C	LP P
DST	80.457	317.04	5.30	21.93	I	C	SP P
FUR	80.619	332.38	5.30	21.93	I	C	SP P
VTS	80.635	322.19	5.30	21.93	I	C	SP P
STU	80.767	333.91	5.26	21.76	I	C	LP P
KBA	80.845	330.60	5.26	21.76	I	C	SP P
WLF	80.901	336.12	5.26	21.76	E	C	LP P
DOU	80.958	337.23	5.26	21.76	E	C	LP P
GWF	81.075	334.94	5.26	21.76	I	C	SP P
BCK	81.115	314.46	5.26	21.76	I	C	SP P
MUN	81.157	207.10	5.26	21.76	I	C	LP P
MMB	81.208	321.25	5.26	21.76	I	C	SP P
EZN	81.399	318.58	5.21	21.54	I	C	SP P
TUL	81.460	47.54	5.21	21.54	E	C	LP P
NWAO	81.702	205.93	5.21	21.54	E	C	LP P
OGA	81.831	331.88	5.17	21.37	I	C	SP P
TRI	81.866	329.63	5.17	21.37	I	C	SP P
SKO	81.913	322.88	5.17	21.37	I	C	SP P
YER	82.539	315.68	5.14	21.24	I	C	SP P
GAC	82.552	29.21	5.14	21.24	E	C	LP P
MNT	83.368	28.17	5.08	20.98	I	C	SP P
RSNY	83.887	29.20	5.05	20.85	E	C	LP P
ATH	84.106	319.08	5.05	20.85	I	C	SP P
SMF	84.295	336.20	5.02	20.72	I	C	SP P
LPF	84.338	339.81	5.02	20.72	I	C	SP P
MZF	85.047	336.81	4.99	20.59	I	C	SP P
TCF	85.086	337.08	4.99	20.59	I	C	SP P
RMP	85.606	328.29	4.96	20.46	I	C	SP P
CVF	86.338	331.15	4.86	20.03	I	C	SP P
LRG	86.394	333.20	4.86	20.03	I	C	SP P
LMR	86.453	333.04	4.86	20.03	I	C	SP P
HLW	86.508	309.06	4.86	20.03	I	C	SP P
TAU	86.635	180.64	4.86	20.03	E	C	LP P
RSCP	86.845	41.18	4.83	19.90	E	C	LP P

Table 76. Station data for event 26 . . continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BLA	87.856	36.83	4.77	19.64	I	C	LP	P
SNZO	88.309	160.34	4.75	19.56	E	D	LP	P
EPF	88.605	337.03	4.75	19.56	I	C	SP	P
SHA	89.525	45.81	4.71	19.39	I	C	LP	P
TOL	92.726	338.97	4.66	19.17	I	C	LP	P
ARO	92.815	288.86	4.64	19.09	I	C	LP	P
ALI	93.165	335.84	4.64	19.09	I	C	LP	P
SJG	110.571	34.97	1.89	7.65	I	C	LP	Pdf
TRN	119.235	33.80	1.88	7.59	I	C	LP	PKP
BUL	124.855	275.26	1.87	7.56	E	C	LP	PKP
PEL	147.984	83.38	1.62	6.53	I	C	SP	PKP
BAO	148.458	30.89	1.62	6.53	I	C	SP	PKP
TMU	149.175	94.26	1.59	6.43	I	C	SP	PKP
RDJ	156.838	27.65	1.30	5.28	I	C	LP	PKP
LPA	157.921	74.32	1.26	5.10	I	C	LP	PKP

Table 77. Station data for event 32.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality	Direction, and Source of Earth Motion		
WAK	6.696	228.05	9.17	113.03	I	D	SP	P
MDJ	14.086	254.34	9.80	79.73	I	D	SP	P
TSK	15.247	207.50	9.70	76.86	I	C	SP	P
MAT	15.564	213.29	9.67	76.10	I	C	SP	P
CN2	17.077	257.23	9.52	72.99	I	D	SP	P
SNY	19.289	254.20	9.35	69.91	I	D	SP	P
DL2	22.226	250.09	9.10	66.07	I	D	SP	P
BJI	24.929	258.70	8.84	62.53	E	D	LP	P
BTO	28.546	265.52	8.61	59.84	I	D	SP	P
NJ2	28.591	242.17	8.61	59.81	I	D	SP	P
TIY	28.657	258.34	8.60	59.77	I	D	SP	P
TTA	31.969	45.24	8.43	57.79	I	D	SP	P
ANP	32.600	230.31	8.39	57.38	E	C	LP	P
TATO	32.788	230.14	8.37	57.24	E	D	LP	P
IMA	32.918	39.33	8.37	57.17	I	D	SP	P
XAN	33.185	256.33	8.36	57.03	I	D	SP	P
QZH	34.286	234.05	8.30	56.41	I	D	SP	P
KDC	34.422	54.21	8.29	56.34	I	D	SP	P
LZH	35.107	263.85	8.26	56.03	I	D	LP	P
COL	35.433	41.17	8.24	55.81	I	D	LP	P
COL	35.433	41.17	8.24	55.81	I	D	SP	P
FBA	35.433	41.17	8.24	55.81	I	D	SP	P
GTA	35.758	271.72	8.23	55.69	I	D	SP	P
GUMO	36.566	186.34	8.18	55.23	I	C	LP	P
GUA	36.611	186.26	8.18	55.20	I	C	LP	P
CD2	38.514	257.37	8.08	54.27	I	D	SP	P
GZH	38.597	238.77	8.08	54.22	I	D	SP	P
PCA	39.894	47.63	8.01	53.55	I	D	SP	P
BAG	40.575	224.15	7.98	53.27	E	C	LP	P
WMQ	41.105	285.53	7.95	52.95	I	D	SP	P
KMI	43.246	252.15	7.83	51.83	I	D	LP	P
SIT	43.417	50.46	7.82	51.74	I	D	SP	P
DAV	47.064	212.23	7.55	49.30	I	C	LP	P
LSA	47.364	266.92	7.53	49.14	I	D	SP	P
KBS	48.708	349.85	7.43	48.23	I	D	SP	P
RSNT	49.991	37.05	7.34	47.44	I	D	SP	P
YKC	50.038	37.01	7.33	47.41	I	D	SP	P
CHG	50.293	250.13	7.31	47.23	I	D	LP	P
CHTO	50.293	250.13	7.31	47.23	E	D	LP	P
HON	50.524	104.57	7.29	47.08	E	C	LP	P
KSH	50.805	287.41	7.27	46.88	I	D	SP	P
NST	52.018	246.48	7.18	46.16	I	D	SP	P
KKN	52.436	269.69	7.16	45.97	I	D	SP	P
PK1	52.503	269.39	7.16	45.93	I	D	SP	P
DMN	52.672	269.65	7.14	45.83	I	D	SP	P
DAG	53.143	356.43	7.11	45.53	E	D	LP	P
DAG	53.143	356.43	7.11	45.53	I	D	SP	P
KEV	53.171	338.29	7.10	45.51	I	D	LP	P
RAB	54.169	175.79	7.03	44.94	E	C	LP	P
NNT	54.694	244.56	7.00	44.66	I	D	SP	P

Table 77. Station data for event 32 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
LON	55.956	56.09	6.91	43.92	E	D	LP	P
EDM	56.074	45.88	6.90	43.85	I	D	SP	P
NDI	57.006	276.46	6.83	43.34	I	D	SP	P
KJF	57.128	333.48	6.83	43.27	I	D	LP	P
NEW	57.437	52.26	6.80	43.07	I	D	SP	P
YKM	57.758	51.01	6.77	42.86	I	D	LP	P
RXF	58.049	50.70	6.75	42.68	I	D	LP	P
LDM	58.223	51.17	6.74	42.57	I	D	LP	P
CLX	58.477	51.29	6.72	42.41	I	D	LP	P
SES	59.013	47.29	6.68	42.09	I	D	SP	P
PMG	59.287	181.83	6.66	41.97	I	C	LP	P
GDH	59.827	8.99	6.62	41.66	I	D	SP	P
GDH	59.827	8.99	6.62	41.66	I	D	LP	P
FFC	60.003	39.22	6.61	41.55	I	D	SP	P
FCC	60.011	32.37	6.60	41.54	I	D	SP	P
HNR	60.097	167.23	6.60	41.49	I	C	LP	P
MKS	60.649	213.97	6.55	41.15	I	C	SP	P
NUR	60.899	332.03	6.53	40.99	I	D	LP	P
BUT	61.254	51.80	6.50	40.78	I	D	SP	P
LRM	61.443	51.89	6.49	40.66	I	D	SP	P
BKS	61.543	64.16	6.48	40.60	I	D	SP	P
JAS	62.531	63.00	6.40	40.02	I	D	SP	P
BMN	62.632	59.03	6.40	39.96	I	D	SP	P
MHI	62.756	294.69	6.39	39.88	I	D	LP	P
UPP	63.455	334.85	6.33	39.47	I	D	SP	P
MNA	63.493	61.21	6.33	39.44	I	D	SP	P
AKU	64.093	353.99	6.28	39.09	I	D	SP	P
HYB	64.158	266.43	6.27	39.05	I	D	SP	P
MTN	64.569	199.08	6.24	38.81	I	C	SP	P
BDW	65.057	52.68	6.21	38.59	I	D	SP	P
TRT	65.569	219.91	6.17	38.28	I	C	SP	P
KONO	65.680	338.62	6.16	38.22	I	D	SP	P
BER	65.962	341.09	6.14	38.05	I	D	SP	P
BER	65.962	341.09	6.14	38.05	I	D	LP	P
RSON	66.228	37.88	6.12	37.90	I	D	LP	P
RSON	66.228	37.88	6.12	37.90	I	D	SP	P
POO	66.366	270.89	6.11	37.82	I	D	SP	P
RSSD	66.825	48.45	6.08	37.61	I	D	LP	P
IR7	68.262	299.84	5.97	36.86	I	D	SP	P
COP	68.474	335.13	5.96	36.75	I	D	LP	P
MUD	68.631	337.26	5.95	36.67	I	D	SP	P
TAB	68.868	304.26	5.94	36.59	I	D	LP	P
LHC	69.916	36.99	5.86	36.06	I	D	SP	P
CTA	69.921	182.49	5.86	36.06	I	C	SP	P
WB2	70.900	194.33	5.79	35.58	I	C	SP	P
ISQ	70.979	189.10	5.79	35.54	I	C	SP	P
KRA	71.040	327.92	5.78	35.51	I	D	SP	P
HAM	71.120	335.41	5.78	35.47	I	D	SP	P
BRN	71.132	333.04	5.78	35.47	I	D	SP	P
SCH	71.295	20.80	5.77	35.40	I	D	SP	P

Table 77. Station data for event 32 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
PPE	71.367	321.15	5.77	35.37	I	D	SP	P
KSP	71.567	330.45	5.75	35.29	I	D	SP	P
SHI	71.591	294.20	5.75	35.28	I	D	SP	P
KOU	71.693	164.67	5.75	35.24	I	C	SP	P
VRI	72.009	321.47	5.73	35.10	I	C	SP	P
JOS	72.155	326.69	5.72	35.03	I	D	SP	P
CLL	72.168	332.60	5.71	35.02	I	D	SP	P
BRG	72.270	331.83	5.70	34.94	I	D	LP	P
ALQ	72.473	56.41	5.69	34.83	I	D	SP	P
ANMO	72.471	56.41	5.69	34.83	E	D	LP	P
TLB	72.521	319.90	5.68	34.81	I	C	SP	P
WIT	72.555	336.98	5.68	34.79	I	D	SP	P
MLR	72.632	321.72	5.68	34.76	I	C	SP	P
ISR	72.682	321.14	5.67	34.74	I	C	SP	P
PRU	72.864	331.04	5.67	34.67	I	D	SP	P
PSZ	72.873	326.76	5.66	34.67	I	D	SP	P
MOX	73.165	333.09	5.65	34.55	I	D	LP	P
CMP	73.176	322.14	5.65	34.54	I	D	SP	P
PSN	73.197	319.26	5.65	34.53	I	D	SP	P
WTS	73.265	336.54	5.64	34.51	I	D	SP	P
HOF	73.384	332.78	5.63	34.46	I	D	SP	P
DEV	73.491	323.80	5.63	34.41	I	D	SP	P
BUD	73.551	327.04	5.62	34.39	I	D	SP	P
DBN	73.578	337.55	5.62	34.37	I	D	LP	P
ZST	73.596	328.58	5.62	34.37	I	D	SP	P
NOU	73.789	162.94	5.61	34.29	I	C	SP	P
VKA	73.798	329.09	5.61	34.28	I	D	SP	P
BNS	74.110	335.88	5.59	34.15	I	D	SP	P
WET	74.120	331.61	5.59	34.15	I	D	SP	P
GRFO	74.133	332.88	5.59	34.14	E	D	LP	P
GRF	74.131	332.87	5.59	34.14	I	D	SP	P
DMU	74.358	345.32	5.58	34.05	I	D	SP	P
ENN	74.615	336.54	5.56	33.94	I	D	SP	P
ASPA	74.621	194.10	5.56	33.94	I	C	SP	P
KMR	74.690	330.32	5.56	33.91	I	D	LP	P
DDK	74.756	344.84	5.55	33.88	I	D	SP	P
DLE	74.886	344.93	5.54	33.83	I	D	SP	P
ACO	74.900	50.47	5.54	33.82	I	D	SP	P
DCN	74.953	345.38	5.54	33.80	I	D	SP	P
ISK	74.953	317.13	5.54	33.80	I	C	SP	P
UCC	74.979	337.50	5.54	33.79	E	D	LP	P
IST	74.997	317.16	5.54	33.78	E	C	LP	P
GPA	75.030	315.87	5.54	33.77	I	D	SP	P
BHG	75.382	330.93	5.51	33.62	I	D	SP	P
FUR	75.479	332.13	5.51	33.58	I	D	SP	P
STU	75.544	333.69	5.50	33.56	I	D	LP	P
DOU	75.569	337.08	5.50	33.55	E	D	LP	P
WLF	75.565	335.94	5.50	33.55	E	D	LP	P
KBA	75.805	330.33	5.49	33.46	I	D	SP	P
ECB	75.813	344.81	5.49	33.45	I	D	SP	P

Table 77. Station data for event 32 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality	Direction, and Source of Earth Motion
BUH	75.904	334.24	5.48	33.41	I	D SP P
ECP	75.922	344.50	5.48	33.40	I	D SP P
BNT	76.031	317.45	5.48	33.35	I	D SP P
KDZ	76.062	319.85	5.47	33.34	I	D SP P
GAP	76.159	331.94	5.47	33.29	I	D SP P
DST	76.335	316.55	5.45	33.18	I	D SP P
CDF	76.408	334.72	5.44	33.14	I	D SP P
SLE	76.654	333.68	5.43	33.02	I	D SP P
OGA	76.716	331.68	5.42	32.99	I	D SP P
SAX	76.874	332.92	5.42	32.95	I	D SP P
TRI	76.880	329.40	5.42	32.94	I	D SP P
ZUL	76.942	333.62	5.41	32.91	I	D SP P
HAU	77.033	335.13	5.40	32.85	I	D SP P
SIO	77.051	49.19	5.40	32.84	I	D SP P
BSF	77.070	334.78	5.40	32.83	I	D SP P
VDM	77.096	338.14	5.40	32.81	E	D LP P
GAC	77.144	30.09	5.39	32.77	E	D LP P
OSS	77.146	332.16	5.39	32.77	I	D SP P
TUL	77.169	48.74	5.39	32.76	I	D LP P
SRS	77.224	320.69	5.38	32.71	I	D SP P
CTI	77.256	330.91	5.37	32.65	I	D SP P
LLS	77.321	332.97	5.37	32.60	I	D SP P
RLO	77.333	48.07	5.36	32.59	I	D SP P
OTT	77.342	30.39	5.36	32.58	I	D SP P
SKO	77.361	322.56	5.36	32.57	I	D SP P
KNT	77.468	321.17	5.35	32.49	I	D SP P
VAY	77.465	321.47	5.35	32.49	I	D SP P
GBO	77.509	48.37	5.34	32.46	I	D SP P
WLO	77.868	50.94	5.31	32.21	I	D SP P
THE	77.888	320.84	5.31	32.20	I	D SP P
MNT	77.912	28.99	5.30	32.18	I	D SP P
IZM	77.932	316.74	5.30	32.17	I	D SP P
FLN	78.016	339.75	5.29	32.12	I	D SP P
TMA	78.049	332.72	5.29	32.10	I	D SP P
ELL	78.090	314.02	5.29	32.08	I	D SP P
LDF	78.094	339.46	5.29	32.07	I	D SP P
PAIG	78.189	319.98	5.28	32.02	I	D SP P
OHR	78.345	322.52	5.27	31.95	I	D SP P
MMK	78.363	333.28	5.27	31.94	I	D SP P
LOR	78.369	336.42	5.27	31.93	I	D SP P
GRR	78.452	339.86	5.26	31.89	I	D SP P
RSNY	78.478	30.02	5.26	31.88	I	D LP P
DIX	78.496	333.65	5.26	31.87	I	D SP P
YER	78.517	315.33	5.26	31.85	I	D SP P
GRC	78.544	336.94	5.25	31.84	I	D SP P
LBF	78.602	336.24	5.25	31.81	I	D SP P
EMS	78.642	333.96	5.25	31.79	I	D SP P
SSF	78.652	336.57	5.25	31.78	I	D SP P
ORO	78.747	333.09	5.24	31.73	I	D SP P
LPF	78.829	339.86	5.23	31.69	I	D SP P

Table 77. Station data for event 32 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
AVF	78.942	336.57	5.22	31.62	I	D	SP P
SMF	78.951	336.19	5.22	31.62	I	D	SP P
MZF	79.673	336.85	5.17	31.25	I	D	SP P
TCF	79.699	337.13	5.16	31.24	I	D	SP P
ATH	79.820	318.89	5.16	31.20	I	D	SP P
LSF	79.904	337.56	5.15	31.17	I	D	SP P
MFF	79.974	338.79	5.15	31.14	I	D	SP P
MNS	80.188	328.55	5.14	31.05	I	D	SP P
COO	80.379	177.25	5.12	30.97	I	C	SP P
RJF	80.791	337.23	5.10	30.80	I	D	SP P
CAF	81.007	336.73	5.09	30.72	I	D	SP P
FRF	81.020	333.12	5.09	30.71	I	D	SP P
LRG	81.200	333.27	5.08	30.64	I	D	SP P
CVF	81.257	331.20	5.07	30.62	I	D	SP P
LMR	81.268	333.12	5.07	30.61	I	D	SP P
LFF	81.325	337.62	5.07	30.59	I	D	SP P
LPO	81.455	337.23	5.06	30.54	I	D	SP P
RSCP	82.099	41.95	5.02	30.28	I	D	LP P
BLA	82.840	37.51	4.98	29.99	I	D	LP P
EPF	83.217	337.24	4.95	29.81	I	D	SP P
RIV	83.599	177.98	4.92	29.58	E	C	LP P
YOU	84.020	180.30	4.88	29.31	I	C	SP P
LGR	84.440	339.04	4.84	29.09	I	D	SP P
CAN	85.060	179.79	4.81	28.86	I	C	SP P
WAM	85.930	179.89	4.76	28.57	I	C	SP P
PTO	86.981	343.06	4.72	28.29	I	D	LP P
TOL	87.246	339.38	4.71	28.25	I	D	SP P
TOL	87.246	339.38	4.71	28.25	I	D	LP P
NWAO	87.266	206.11	4.71	28.25	E	C	LP P
LIS	89.430	342.88	4.68	28.04	I	D	SP P
CRT	89.708	338.24	4.68	28.00	I	D	SP P
ALM	89.751	337.27	4.68	28.00	I	D	SP P
ARO	91.199	289.47	4.64	27.74	I	D	SP P
IFR	93.578	338.37	4.56	27.22	I	D	SP P
SNZO	93.846	160.70	4.54	27.15	E	C	LP P
GUV	116.017	35.57	1.88	10.87	I	D	SP PKP
TET	118.332	278.81	1.87	10.85	I	D	SP PKP
MTD	120.070	279.98	1.87	10.83	I	D	SP PKP
KRI	121.352	281.59	1.87	10.83	I	D	SP PKP
BUL	124.442	279.81	1.87	10.79	I	D	SP PKP
SWZ	131.569	276.37	1.84	10.65	I	D	SP PKP
HJA	142.188	57.40	1.72	9.96	I	D	SP PKP
CYA	146.052	63.39	1.65	9.51	I	D	SP PKP
ROCH	146.148	74.82	1.64	9.50	I	D	SP PKP
PEL	146.466	74.72	1.64	9.45	I	D	SP PKP
FCH	146.834	74.56	1.63	9.40	I	D	SP PKP
PCH	146.891	75.19	1.63	9.39	I	D	SP PKP
CHCH	147.011	75.75	1.62	9.38	I	D	SP PKP
TMU	148.739	84.67	1.58	9.11	I	D	SP PKP

Table 78. Station data for event 35.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ISN	9.844	205.56	11.53	84.97	I	C	SP	P
NII	11.062	213.24	11.35	78.80	I	C	SP	P
CN2	15.297	264.01	10.36	63.52	I	D	SP	P
SHK	16.653	224.24	10.10	60.75	I	D	SP	P
SNY	17.357	259.59	9.97	59.51	I	D	SP	P
SEO	17.536	242.89	9.94	59.23	I	D	LP	P
DL2	20.109	254.04	9.58	55.85	I	D	SP	P
BJI	23.152	262.57	9.29	53.40	E	D	LP	P
SSE	25.458	239.25	9.03	51.31	E	D	LP	P
HHC	25.897	268.24	8.98	50.88	I	D	SP	P
NJ2	26.170	244.04	8.95	50.63	I	D	SP	P
TIY	26.847	261.34	8.88	50.08	I	D	SP	P
ANP	29.853	230.74	8.67	48.55	I	D	LP	P
TATO	30.036	230.55	8.66	48.47	E	N	LP	P
XAN	31.275	258.45	8.59	47.92	I	D	SP	P
QZH	31.624	234.64	8.57	47.76	I	D	SP	P
LZH	33.518	266.04	8.46	47.01	I	D	SP	P
GUMO	33.790	183.19	8.45	46.89	I	C	LP	P
GUA	33.837	183.11	8.45	46.87	E	C	LP	P
GTA	34.536	274.07	8.40	46.56	I	D	SP	P
CD2	36.634	258.87	8.29	45.74	I	D	SP	P
BAG	37.708	223.68	8.23	45.31	E	C	LP	P
COL	38.354	38.73	8.19	45.07	I	C	LP	P
COL	38.354	38.73	8.19	45.07	I	C	LP	P
DAV	44.077	210.93	7.88	42.93	E	C	LP	P
CHTO	48.112	250.36	7.60	41.05	E	D	LP	P
NST	49.706	246.49	7.47	40.22	I	C	SP	P
KSH	50.332	288.30	7.43	39.94	I	C	SP	P
KBS	51.099	349.83	7.37	39.54	I	C	LP	P
HON	51.266	100.67	7.36	39.47	I	C	LP	P
RSNT	52.950	35.13	7.23	38.66	I	C	LP	P
KEV	55.153	338.37	7.07	37.68	E	C	LP	P
KEV	55.153	338.37	7.07	37.68	I	C	LP	P
DAG	55.719	355.99	7.03	37.39	I	C	LP	P
DAG	55.719	355.99	7.03	37.39	I	D	SP	P
LON	58.604	53.65	6.81	36.05	I	C	LP	P
KJF	58.912	333.44	6.79	35.93	I	C	SP	P
EDM	58.926	43.75	6.79	35.93	I	C	SP	P
NEW	60.171	49.98	6.69	35.33	I	C	SP	P
YKM	60.518	48.77	6.66	35.16	I	C	SP	P
RXF	60.816	48.48	6.64	35.01	I	C	SP	P
LDM	60.980	48.94	6.63	34.93	I	C	SP	P
FHC	61.050	60.18	6.62	34.89	I	C	SP	P
CLX	61.232	49.06	6.61	34.80	I	C	SP	P
QUE	61.834	284.88	6.56	34.52	I	C	LP	P
WDC	62.039	59.58	6.54	34.42	I	C	SP	P
NUR	62.617	331.81	6.50	34.14	I	C	LP	P
MHI	62.638	294.69	6.49	34.13	I	C	LP	P
GDH	62.671	7.97	6.49	34.11	I	C	LP	P
GDH	62.671	7.97	6.49	34.11	E	C	LP	P

Table 78. Station data for event 35 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
BKS	63.968	61.71	6.39	33.50	I	C	LP P
BUT	63.998	49.63	6.38	33.48	I	C	SP P
MHC	64.675	61.81	6.33	33.16	I	C	SP P
JAS	64.991	60.62	6.31	33.01	I	C	SP P
POO	65.041	270.56	6.30	32.99	I	C	SP P
UPP	65.289	334.44	6.28	32.87	I	C	SP P
PRI	66.057	62.22	6.22	32.51	I	C	SP P
AKU	66.597	353.21	6.18	32.26	I	C	SP P
CTAO	67.215	180.45	6.13	31.97	I	C	LP P
CTA	67.215	180.45	6.13	31.97	I	C	SP P
KONO	67.662	338.05	6.10	31.79	I	C	LP P
PVC	67.726	157.70	6.09	31.76	I	C	SP P
BER	68.038	340.46	6.07	31.64	I	C	LP P
BER	68.038	340.46	6.07	31.64	I	C	LP P
ISQ	68.142	187.20	6.06	31.60	I	C	SP P
RSON	69.180	36.13	5.99	31.18	I	C	LP P
TAB	69.240	303.86	5.99	31.15	I	C	LP P
KOU	69.515	162.40	5.96	31.02	I	C	SP P
RSSD	69.632	46.49	5.96	30.97	I	C	LP P
COP	70.313	334.48	5.91	30.70	I	C	SP P
MUD	70.557	336.57	5.89	30.60	I	C	SP P
AFI	71.456	137.23	5.83	30.23	I	C	LP P
GLA	71.669	61.06	5.81	30.15	I	C	LP P
NOU	71.673	160.74	5.81	30.15	I	C	SP P
ASPA	71.709	192.34	5.81	30.14	I	C	SP P
KVT	72.559	312.13	5.76	29.85	I	C	SP P
KRA	72.567	327.22	5.76	29.85	I	C	SP P
BRN	72.882	332.29	5.73	29.69	I	C	SP P
HAM	72.969	334.64	5.73	29.66	I	C	SP P
CFR	73.154	319.52	5.71	29.59	I	C	SP P
SPC	73.167	326.53	5.71	29.58	I	C	SP P
KSP	73.206	329.71	5.71	29.57	I	C	SP P
VRI	73.237	320.79	5.71	29.56	I	C	SP P
JOS	73.626	325.95	5.69	29.43	I	C	SP P
TLB	73.674	319.20	5.68	29.42	I	C	SP P
MLR	73.871	321.00	5.67	29.35	I	C	SP P
CLL	73.899	331.81	5.67	29.34	I	C	SP P
ISR	73.893	320.42	5.67	29.35	I	C	SP P
BRG	73.968	331.04	5.67	29.32	I	C	LP P
PSN	74.318	318.53	5.64	29.15	I	C	SP P
PRU	74.526	330.22	5.62	29.06	I	C	SP P
KDE	74.673	315.03	5.61	29.00	I	C	SP P
BUC1	74.745	320.23	5.61	28.98	I	C	SP P
MOX	74.915	332.25	5.60	28.93	I	C	SP P
SRO	75.027	326.84	5.59	28.89	I	D	SP P
ANMO	75.105	54.45	5.59	28.87	I	C	LP P
NAU	75.113	209.70	5.59	28.87	I	C	SP P
HOF	75.121	331.92	5.59	28.87	I	C	SP P
ZST	75.150	327.76	5.59	28.86	I	C	SP P
WTS	75.158	335.66	5.59	28.86	I	C	SP P

Table 78. Station data for event 35 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
VKA	75.374	328.25	5.58	28.82	I	C	SP	P
WBN	75.451	198.62	5.57	28.79	I	C	SP	P
DBN	75.511	336.64	5.57	28.77	I	C	LP	P
KHC	75.585	330.32	5.57	28.75	I	C	SP	P
WET	75.806	330.74	5.55	28.64	I	C	SP	P
GRF	75.871	331.99	5.54	28.61	I	C	SP	P
BNS	75.975	334.96	5.53	28.57	I	C	SP	P
GPA	75.982	315.06	5.53	28.57	I	C	SP	P
IST	76.014	316.35	5.53	28.56	I	C	LP	P
CLG	76.076	335.09	5.53	28.53	I	C	SP	P
PVL	76.077	320.00	5.53	28.53	I	C	SP	P
TNS	76.260	333.87	5.52	28.48	I	C	SP	P
KMR	76.320	329.43	5.51	28.46	I	C	LP	P
ENN	76.507	335.60	5.50	28.40	I	C	SP	P
DMU	76.581	344.30	5.50	28.37	I	C	SP	P
UCC	76.909	336.54	5.48	28.27	I	C	LP	P
DDK	76.962	343.81	5.48	28.25	I	C	SP	P
BHG	77.038	330.00	5.47	28.22	I	C	SP	P
DLE	77.095	343.89	5.47	28.19	I	C	SP	P
PLD	77.121	319.65	5.47	28.18	I	C	SP	P
DCN	77.178	344.34	5.46	28.16	I	C	SP	P
FUR	77.186	331.18	5.46	28.15	I	C	SP	P
KDZ	77.208	318.97	5.46	28.14	I	C	SP	P
STU	77.317	332.73	5.45	28.08	I	D	LP	P
STU	77.317	332.73	5.45	28.08	I	C	LP	P
DST	77.320	315.67	5.45	28.08	I	C	SP	P
VTS	77.372	320.87	5.44	28.06	I	C	SP	P
KBA	77.434	329.39	5.44	28.03	I	C	SP	P
WLF	77.432	334.97	5.44	28.03	E	C	LP	P
DOU	77.481	336.09	5.44	28.01	E	C	LP	P
ETA	77.594	343.51	5.43	27.97	I	C	SP	P
ACO	77.667	48.65	5.42	27.94	I	C	SP	P
BUH	77.701	333.26	5.42	27.93	I	C	SP	P
LJU	77.906	328.12	5.41	27.88	I	C	SP	P
MMB	77.965	319.94	5.41	27.86	I	C	SP	P
ECB	78.017	343.74	5.40	27.83	I	C	SP	P
ECP	78.115	343.43	5.39	27.78	I	C	SP	P
CEY	78.205	328.03	5.38	27.72	I	C	SP	P
CDF	78.224	333.72	5.38	27.71	I	C	SP	P
SRS	78.408	319.75	5.35	27.56	I	C	SP	P
OGA	78.403	330.69	5.36	27.56	I	C	SP	P
SLE	78.426	332.67	5.35	27.55	I	C	LP	P
TRI	78.468	328.42	5.35	27.52	I	C	SP	P
SKO	78.634	321.60	5.33	27.42	I	C	SP	P
KNT	78.675	320.21	5.33	27.40	I	C	SP	P
VAY	78.687	320.51	5.32	27.39	I	C	SP	P
ZUL	78.711	332.60	5.32	27.38	I	C	LP	P
OSS	78.853	331.14	5.31	27.30	I	C	LP	P
HAU	78.865	334.10	5.31	27.29	I	C	SP	P
BSF	78.888	333.75	5.30	27.28	I	C	SP	P

Table 78. Station data for event 35 . continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
IZM	78.924	315.78	5.30	27.26	I	C	SP P
ELL	78.946	313.06	5.30	27.25	I	C	SP P
QZO	78.970	49.91	5.30	27.24	I	C	SP P
VDM	79.049	337.08	5.29	27.20	E	C	LP P
LLS	79.063	331.94	5.29	27.19	I	C	LP P
THE	79.079	319.86	5.29	27.19	I	C	SP P
TTG	79.157	323.23	5.28	27.15	I	C	SP P
VDL	79.249	331.46	5.27	27.11	I	C	LP P
PAIG	79.338	318.99	5.27	27.08	I	C	SP P
YER	79.439	314.35	5.26	27.03	I	C	SP P
TMA	79.779	331.66	5.22	26.84	I	C	LP P
SIO	79.842	47.42	5.22	26.80	I	C	SP P
TUL	79.969	46.99	5.21	26.74	I	C	LP P
FLN	80.031	338.64	5.20	26.71	I	C	SP P
LDF	80.098	338.35	5.20	26.68	I	C	SP P
MMK	80.117	332.20	5.20	26.67	I	D	LP P
LOR	80.253	335.32	5.19	26.63	I	C	SP P
DIX	80.265	332.56	5.19	26.62	I	C	LP P
EMS	80.424	332.86	5.18	26.57	I	C	LP P
GRC	80.449	335.83	5.17	26.56	I	C	SP P
GRR	80.472	338.73	5.17	26.55	I	C	SP P
LBF	80.478	335.13	5.17	26.55	I	C	SP P
SSF	80.541	335.46	5.17	26.53	I	C	SP P
SMF	80.825	335.07	5.15	26.43	I	C	SP P
AVF	80.831	335.44	5.15	26.43	I	C	SP P
LPF	80.849	338.72	5.15	26.42	I	C	SP P
MNT	80.909	27.44	5.15	26.40	I	C	SP P
ATH	80.915	317.82	5.15	26.40	I	C	SP P
RIV	80.999	176.24	5.14	26.38	E	C	LP P
KLG	81.112	201.80	5.13	26.34	I	C	SP P
YOU	81.361	178.58	5.12	26.27	I	C	SP P
RSNY	81.473	28.46	5.12	26.24	I	C	LP P
MZF	81.573	335.70	5.11	26.20	I	C	SP P
TCF	81.610	335.97	5.11	26.19	I	C	SP P
LSF	81.832	336.39	5.09	26.12	I	C	SP P
MFF	81.951	337.61	5.09	26.08	I	C	SP P
ADE	82.347	186.61	5.06	25.95	I	C	SP P
CAN	82.413	178.10	5.06	25.93	I	C	SP P
RJF	82.706	336.02	5.04	25.82	I	C	SP P
FRF	82.764	331.93	5.04	25.80	I	C	SP P
CAF	82.901	335.52	5.03	25.75	I	C	SP P
CVF	82.919	330.01	5.03	25.74	I	C	SP P
LRG	82.951	332.07	5.02	25.73	I	C	SP P
LMR	83.012	331.92	5.02	25.71	I	C	SP P
LFF	83.255	336.39	5.01	25.63	I	C	SP P
NWAO	84.269	204.56	4.93	25.21	I	C	LP P
TOO	84.640	180.96	4.89	25.00	I	C	SP P
RSCP	85.005	40.32	4.86	24.85	I	C	LP P
EPF	85.130	335.93	4.86	24.80	I	C	SP P
RKG	85.406	204.36	4.84	24.71	I	C	SP P

Table 78. Station data for event 35 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
LHE	85.502	336.55	4.83	24.67	I	C	SP	P
BLA	85.794	35.91	4.82	24.59	I	C	LP	P
LGR	86.423	337.68	4.78	24.38	I	C	SP	P
PTO	89.115	341.59	4.70	23.96	I	C	LP	P
TOL	89.241	337.90	4.70	23.96	I	C	LP	P
ARO	90.768	287.88	4.67	23.77	I	C	LP	P
LIS	91.555	341.32	4.65	23.69	I	C	SP	P
CRT	91.655	336.67	4.65	23.67	I	C	SP	P
SNZO	91.800	159.27	4.64	23.62	I	C	LP	P
IFR	95.527	336.65	4.53	23.04	I	C	SP	P
SJG	108.392	32.93	1.89	9.40	E	C	LP	P
GUV	118.985	34.25	1.87	9.32	I	C	SP	PKP
MTD	119.116	276.82	1.87	9.32	I	C	SP	PKP
KRI	120.476	278.33	1.87	9.31	I	C	SP	PKP
BUL	123.473	276.36	1.87	9.29	I	C	SP	PKP
LPB	137.930	54.77	1.79	8.89	E	C	LP	PKP
HJA	144.766	57.93	1.68	8.34	I	C	SP	PKP
ROCH	148.121	76.77	1.60	7.95	I	C	SP	PKP
TACH	148.586	77.73	1.59	7.89	I	C	SP	PKP
FCH	148.816	76.60	1.58	7.85	I	C	SP	PKP
TMU	150.278	87.50	1.54	7.64	I	C	SP	PKP
RDJ	154.239	21.43	1.40	6.96	I	C	LP	PKP
LPA	157.737	64.68	1.26	6.24	E	C	LP	PKP

Table 79. Station data for event 88.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
MDJ	24.144	258.23	9.58	42.60	I	C	SP P
FBAL	25.582	48.05	9.41	41.67	I	C	LP P
FBAS	25.825	48.36	9.36	41.40	I	C	SP P
CN2	26.986	261.04	9.27	40.92	I	C	SP P
SHK	29.781	238.93	8.89	38.91	I	C	SP P
YKA	40.173	45.42	8.26	35.70	I	C	LP P
RSNT	40.185	45.44	8.26	35.70	I	C	LP P
ANP	42.978	243.17	8.10	34.91	I	C	LP P
TATO	43.163	243.03	8.10	34.91	I	C	LP P
GUMO	44.041	206.83	8.04	34.61	I	D	LP P
HON	44.307	124.18	8.01	34.47	I	C	LP P
GTA	44.471	276.80	8.01	34.47	I	C	SP P
COR	46.139	71.41	7.93	34.08	I	C	SP P
WMQ	48.263	289.73	7.77	33.30	I	C	SP P
DAG	48.286	0.76	7.77	33.30	I	D	SP P
BAG	50.826	237.79	7.57	32.33	E	C	LP P
KEV	51.470	342.22	7.53	32.14	E	D	LP P
GDH	52.924	15.68	7.41	31.57	I	D	LP P
KMI	53.257	261.49	7.37	31.38	E	C	LP P
RSON	56.327	48.01	7.14	30.30	I	C	LP P
RSSD	56.494	59.67	7.14	30.30	I	C	LP P
DAV	56.769	227.09	7.10	30.11	I	C	LP P
CHG	60.379	260.24	6.83	28.85	I	C	SP P
CHTO	60.379	260.24	6.83	28.85	I	C	LP P
BDT	61.603	259.13	6.75	28.48	I	C	SP P
OBN	61.793	328.71	6.71	28.30	I	D	SP P
ANMO	62.070	68.41	6.71	28.30	I	C	LP P
NST	62.237	257.10	6.71	28.30	I	C	SP P
KONO	63.644	345.66	6.59	27.75	I	D	LP P
NDI	65.029	284.66	6.47	27.20	I	C	SP P
MUD	66.783	344.94	6.30	26.43	I	C	SP P
TUL	66.829	60.26	6.30	26.43	I	C	LP P
GAC	67.754	40.56	6.22	26.07	E	C	LP P
RSNY	69.089	40.60	6.14	25.71	I	C	SP P
RSNY	69.089	40.60	6.14	25.71	E	C	LP P
QUE	69.413	293.28	6.10	25.53	I	C	LP P
SCP	70.978	44.93	5.99	25.04	I	C	LP P
DMU	70.991	354.13	5.99	25.04	I	D	SP P
CLL	71.091	341.04	5.99	25.04	I	D	SP P
DCN	71.565	354.31	5.95	24.86	I	D	SP P
DLE	71.578	353.84	5.95	24.86	I	D	SP P
AFI	71.898	154.90	5.92	24.73	I	D	LP P
PRU	72.056	339.64	5.92	24.73	I	D	SP P
WES	72.138	39.63	5.92	24.73	E	C	LP P
JOS	72.145	335.22	5.92	24.73	I	D	SP P
HOF	72.254	341.46	5.88	24.55	I	C	SP P
ENN	72.787	345.43	5.85	24.41	I	C	SP P
PSZ	72.838	335.43	5.85	24.41	I	D	SP P
GRA1	72.970	341.70	5.85	24.41	I	D	SP P
GRFO	72.971	341.71	5.85	24.41	E	D	LP P

Table 79. Station data for event 88 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
GRF	72.970	341.70	5.85	24.41	I	D	SP P
KHC	73.064	339.99	5.85	24.41	I	D	SP P
HYB	73.136	276.25	5.85	24.41	I	C	SP P
WET	73.186	340.45	5.85	24.41	I	D	SP P
BUD	73.452	335.84	5.81	24.24	I	D	SP P
MLR	73.509	330.44	5.81	24.24	I	D	SP P
CMP	73.968	330.96	5.78	24.10	I	D	SP P
KMR	73.980	339.29	5.78	24.10	I	D	LP P
VUN	73.992	165.38	5.78	24.10	I	D	SP P
PSN	74.504	328.15	5.74	23.93	I	C	SP P
SHA	74.801	58.01	5.71	23.79	I	C	LP P
CDF	74.875	343.97	5.71	23.79	I	D	SP P
POO	74.910	280.68	5.71	23.79	I	C	SP P
KBA	75.073	339.51	5.71	23.79	I	D	SP P
FLN	75.561	349.26	5.67	23.62	I	D	SP P
CTA	76.448	196.84	5.61	23.35	I	D	LP P
CTAO	76.448	196.84	5.61	23.35	E	D	LP P
LOR	76.499	346.03	5.61	23.35	I	C	LP P
SSF	76.750	346.23	5.58	23.22	I	D	SP P
DIM	76.773	329.27	5.58	23.22	I	D	SP P
VTS	76.941	331.17	5.58	23.22	I	C	SP P
PLD	76.975	329.92	5.58	23.22	I	C	SP P
AVF	77.037	346.28	5.58	23.22	I	D	SP P
SMF	77.112	345.91	5.58	23.22	I	D	SP P
TCF	77.682	346.97	5.55	23.09	I	D	SP P
MZF	77.704	346.70	5.55	23.09	I	D	SP P
MMB	77.729	330.41	5.55	23.09	I	D	SP P
LSF	77.806	347.44	5.51	22.91	I	D	SP P
PLDF	77.805	345.92	5.51	22.91	I	D	SP P
PYM	78.104	346.31	5.51	22.91	I	D	SP P
MNS	79.702	338.60	5.41	22.47	I	D	SP P
ASPA	82.580	207.35	5.14	21.29	I	D	LP P
HLW	85.967	319.94	4.90	20.26	I	C	LP P
STK	88.783	198.67	4.73	19.52	I	D	SP P
WAM	91.911	191.94	4.67	19.27	I	C	SP P
ADE	92.329	200.31	4.66	19.22	I	D	SP P
SNZO	96.596	171.67	4.54	18.71	E	D	LP P
TAU	98.725	192.09	4.49	18.50	E	D	LP P
TET	125.549	295.40	1.86	7.57	I	C	SP PKP
LPA	144.978	72.05	1.68	6.83	E	N	LP PKP
SPA	145.023	180.00	1.68	6.83	I	D	SP PKP
SUR	145.429	295.85	1.68	6.83	I	C	SP PKP
TUH	147.007	296.84	1.64	6.65	I	C	SP PKP

Table 80. Station data for event 105.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
NEM	2.049	245.34	13.93	97.24	I	D	SP	P
OBI	3.799	251.83	14.03	91.94	I	D	SP	P
ASA	4.184	265.94	14.03	92.72	I	D	SP	P
RMJ	4.694	269.06	14.01	86.19	I	D	SP	P
MRR	5.557	252.55	13.97	84.17	I	D	SP	P
HAK	5.918	248.65	13.95	83.29	I	D	SP	P
MIY	6.479	227.35	13.91	82.11	I	D	SP	P
AIK	9.693	233.73	13.61	75.73	I	D	SP	P
MAT	10.766	228.02	13.48	73.71	I	D	SP	P
WAJ	10.903	235.16	13.46	73.47	I	D	SP	P
CN2	16.327	276.49	12.60	63.80	I	D	SP	P
SEO	17.308	254.73	12.41	62.12	E	D	LP	P
DL2	20.492	264.20	10.23	46.74	I	C	SP	P
SSE	24.907	247.41	9.45	42.30	I	C	LP	P
TJY	27.578	268.83	9.20	40.93	I	C	SP	P
ANP	28.773	237.51	9.03	40.03	I	C	LP	P
TATO	28.944	237.26	9.01	39.91	E	C	LP	P
GUMO	30.645	186.25	8.83	38.99	I	C	LP	P
GUA	30.690	186.16	8.83	38.97	E	C	LP	P
QZH	30.757	241.09	8.82	38.93	I	C	SP	P
GTA	35.924	279.49	8.49	37.19	I	C	SP	P
BAG	36.197	228.76	8.47	37.11	I	C	LP	P
MAN	37.384	226.48	8.40	36.75	I	C	SP	P
PGP	38.422	225.65	8.34	36.43	I	C	SP	P
COL	40.306	36.38	8.23	35.90	I	C	SP	P
COL	40.306	36.38	8.23	35.90	I	C	LP	P
QIZ	40.612	244.24	8.22	35.82	I	C	SP	P
FBAS	40.698	36.56	8.21	35.80	I	C	SP	P
DAV	41.904	214.76	8.15	35.48	I	C	LP	P
WMQ	42.593	291.50	8.11	35.27	I	C	SP	P
INK	45.649	30.62	7.95	34.46	I	C	SP	P
CHG	48.096	254.44	7.80	33.73	I	C	LP	P
CHTO	48.096	254.44	7.80	33.73	I	C	LP	P
CHTO	48.096	254.44	7.80	33.73	I	C	SP	P
NST	49.457	250.41	7.69	33.19	I	C	SP	P
HON	49.710	99.22	7.67	33.09	E	C	LP	P
KKN	52.202	273.82	7.47	32.13	I	C	SP	P
PKI	52.237	273.51	7.47	32.11	I	C	SP	P
KSH	52.386	291.50	7.45	32.06	I	C	SP	P
DMN	52.433	273.75	7.45	32.04	I	C	SP	P
KBS	54.462	350.53	7.29	31.26	E	C	LP	P
RSNT	55.039	34.22	7.24	31.04	I	C	LP	P
SNG	55.380	242.78	7.21	30.91	I	C	LP	P
NDI	57.433	279.82	7.06	30.18	I	C	SP	P
KEV	58.538	339.55	6.98	29.81	I	C	LP	P
DAG	59.017	356.51	6.94	29.63	I	C	LP	P
LON	59.735	52.77	6.89	29.36	E	C	LP	P
COR	60.068	55.52	6.86	29.24	I	C	SP	P
EDM	60.585	43.06	6.82	29.04	I	C	SP	P
RXF	62.223	47.84	6.69	28.43	I	C	SP	P

Table 80. Station data for event 105 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
LHD	62.349	48.59	6.68	28.39	I	C	SP P
LDM	62.363	48.30	6.67	28.38	I	C	SP P
CLX	62.607	48.44	6.66	28.29	I	C	SP P
HYB	63.501	268.88	6.58	27.96	I	C	SP P
CTAO	63.999	181.97	6.54	27.78	I	C	LP P
CTAO	63.999	181.97	6.54	27.78	I	C	SP P
- WB2	65.070	194.31	6.46	27.38	I	C	SP P
OBN	65.321	324.02	6.44	27.29	I	C	LP P
JAS	65.713	60.13	6.41	27.14	E	C	LP P
GDH	65.733	8.30	6.40	27.13	I	C	LP P
NUR	65.956	333.13	6.39	27.05	I	C	LP P
POO	66.155	273.05	6.37	26.96	I	C	SP P
NOU	68.281	161.75	6.19	26.16	I	C	SP P
AFI	68.385	137.73	6.18	26.13	E	C	LP P
FRB	68.544	16.59	6.17	26.07	I	C	SP P
RMQ	70.348	179.41	6.03	25.44	I	C	SP P
RSSD	71.130	46.44	5.97	25.18	I	C	LP P
RSON	71.198	36.18	5.97	25.15	I	C	LP P
TAB	71.917	305.63	5.92	24.93	I	C	LP P
COP	73.676	335.66	5.79	24.36	I	C	SP P
COP	73.676	335.66	5.79	24.36	I	C	LP P
MUD	73.934	337.71	5.78	24.30	I	C	SP P
LHC	74.929	35.54	5.71	23.99	I	C	SP P
KRA	75.847	328.50	5.64	23.70	I	C	SP P
CEA	75.878	323.30	5.64	23.69	I	C	SP P
ALQ	76.162	54.66	5.62	23.60	I	C	SP P
ANMO	76.160	54.66	5.62	23.60	I	C	LP P
BRN	76.226	333.48	5.62	23.58	I	C	SP P
KSP	76.520	330.94	5.60	23.51	I	C	SP P
CVO	76.680	322.43	5.59	23.47	I	C	SP P
JOS	76.886	327.24	5.58	23.41	I	C	SP P
MLR	77.039	322.35	5.57	23.37	I	C	SP P
CLL	77.238	333.00	5.56	23.32	I	C	SP P
VLR	77.231	324.54	5.56	23.32	I	C	SP P
XSO	77.559	343.26	5.54	23.24	I	C	SP P
WIT	77.841	337.24	5.52	23.16	I	C	SP P
EKA	77.894	343.70	5.52	23.14	I	C	SP P
ESK	77.918	343.72	5.52	23.13	I	C	SP P
ECK	78.030	343.63	5.51	23.10	I	C	SP P
BUD	78.301	327.49	5.49	23.00	I	C	SP P
HOF	78.460	333.10	5.48	22.95	I	C	SP P
WTS	78.529	336.78	5.47	22.93	I	C	SP P
DBN	78.888	337.75	5.45	22.83	I	C	LP P
KHC	78.907	331.51	5.45	22.83	I	C	SP P
ACO	79.037	49.04	5.44	22.79	I	C	SP P
WET	79.133	331.92	5.43	22.76	I	C	SP P
GRA1	79.211	333.15	5.43	22.73	I	C	SP P
GRF	79.211	333.15	5.43	22.73	I	C	SP P
PVL	79.223	321.31	5.43	22.73	I	C	SP P
BNS	79.342	336.09	5.42	22.70	I	C	SP P

Table 80. Station data for event 105 . . . continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KMR	79.630	330.62	5.39	22.57	I	D	SP	P
ENN	79.878	336.72	5.36	22.43	I	C	SP	P
BGG	79.967	335.64	5.35	22.38	I	C	SP	P
DMU	79.971	345.31	5.35	22.38	I	C	SP	P
QZO	80.270	50.37	5.32	22.25	I	C	SP	P
UCC	80.286	337.64	5.31	22.24	E	C	LP	P
- DDK	80.353	344.82	5.31	22.21	I	C	SP	P
DLE	80.486	344.91	5.30	22.15	I	C	SP	P
FUR	80.517	332.35	5.29	22.14	I	C	SP	P
VTS	80.536	322.14	5.29	22.13	I	C	SP	P
DCN	80.568	345.35	5.29	22.12	I	C	SP	P
STU	80.665	333.87	5.28	22.08	I	C	LP	P
KBA	80.743	330.56	5.27	22.05	I	C	SP	P
WLF	80.798	336.08	5.27	22.04	E	C	LP	P
GWF	80.972	334.90	5.25	21.97	I	C	SP	P
SCE	81.347	331.52	5.22	21.81	I	C	SP	P
TUL	81.425	47.52	5.21	21.78	I	C	LP	P
CDF	81.580	334.84	5.20	21.72	I	C	SP	P
RLO	81.635	46.87	5.19	21.70	I	C	SP	P
OGA	81.729	331.84	5.18	21.66	I	C	SP	P
NWAO	81.770	205.88	5.18	21.65	I	C	LP	P
SLE	81.773	333.80	5.18	21.65	E	C	LP	P
ECH	81.791	334.82	5.18	21.64	I	C	SP	P
GBO	81.790	47.18	5.18	21.64	I	C	SP	P
LTX	81.806	56.94	5.18	21.63	I	C	SP	P
SKO	81.813	322.84	5.18	21.63	I	C	SP	P
VAY	81.843	321.76	5.17	21.62	I	C	SP	P
SAX	81.953	333.04	5.17	21.59	E	C	LP	P
ZUL	82.057	333.73	5.16	21.55	E	C	LP	P
OSS	82.184	332.29	5.15	21.52	E	C	LP	P
HAU	82.224	335.21	5.15	21.51	I	C	SP	P
BSF	82.245	334.86	5.15	21.50	I	C	SP	P
ROF	82.346	334.73	5.14	21.48	I	C	SP	P
LLS	82.402	333.07	5.14	21.46	E	C	LP	P
VAL	82.432	346.70	5.14	21.46	I	C	LP	P
GAC	82.488	29.19	5.13	21.44	I	C	LP	P
VDL	82.583	332.60	5.13	21.42	E	C	LP	P
OHR	82.793	322.73	5.12	21.39	I	C	SP	P
JER	82.804	307.76	5.12	21.39	I	C	SP	P
KZN	83.019	321.65	5.11	21.34	I	C	SP	P
BHO	83.078	47.94	5.11	21.32	I	C	SP	P
TMA	83.115	332.78	5.10	21.31	E	C	LP	P
MNT	83.303	28.14	5.09	21.24	I	C	SP	P
MMK	83.459	333.32	5.08	21.19	E	C	LP	P
LDF	83.484	339.42	5.07	21.18	I	C	SP	P
DIX	83.611	333.68	5.07	21.15	E	C	LP	P
LOR	83.622	336.41	5.06	21.14	I	C	LP	P
EMS	83.773	333.97	5.06	21.11	E	C	LP	P
GRC	83.821	336.91	5.05	21.09	I	C	SP	P
RSNY	83.823	29.17	5.05	21.09	I	C	LP	P

Table 80. Station data for event 105 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
LBF	83.845	336.22	5.05	21.09	I	C	SP	P
GRR	83.858	339.80	5.05	21.08	I	C	SP	P
SSF	83.911	336.55	5.05	21.07	I	C	SP	P
BGF	84.557	336.75	5.01	20.90	I	C	SP	P
PLDF	84.869	336.01	4.99	20.82	I	C	SP	P
TCF	84.983	337.04	4.98	20.79	I	C	SP	P
MNS	85.017	328.56	4.98	20.79	I	C	SP	P
SSB	85.221	335.13	4.97	20.73	I	C	SP	P
PYM	85.247	336.31	4.97	20.73	I	C	SP	P
MFF	85.333	338.67	4.97	20.72	I	C	SP	P
RMP	85.504	328.25	4.95	20.66	I	C	LP	P
FRF	86.103	333.02	4.88	20.35	I	C	SP	P
CVF	86.236	331.11	4.87	20.30	I	C	SP	P
CAF	86.271	336.59	4.87	20.29	I	C	SP	P
LRG	86.291	333.16	4.87	20.29	I	C	SP	P
LMR	86.351	333.01	4.86	20.27	I	C	SP	P
HLW	86.418	309.02	4.86	20.24	I	C	LP	P
LFF	86.630	337.46	4.84	20.18	I	C	SP	P
TAU	86.730	180.60	4.84	20.15	E	C	LP	P
LPO	86.742	337.06	4.84	20.15	I	C	SP	P
BLA	87.803	36.80	4.78	19.90	I	C	LP	P
MLS	88.358	336.46	4.75	19.77	I	C	SP	P
SNZO	88.412	160.30	4.75	19.76	I	C	LP	P
SHA	89.486	45.77	4.71	19.60	I	C	LP	P
LGR	89.806	338.72	4.71	19.61	I	C	SP	P
GUD	91.934	339.27	4.67	19.43	I	C	SP	P
PTO	92.508	342.63	4.65	19.35	I	C	LP	P
TOL	92.624	338.93	4.65	19.34	I	C	SP	P
UPA	111.757	51.85	1.89	7.74	E	C	LP	Pdf
BNG	113.804	302.88	1.88	7.71	I	C	SP	Pdf
SBA	122.322	175.41	1.87	7.65	I	C	SP	PKP
BUL	124.808	275.28	1.87	7.64	I	C	SP	PKP
ITR	144.229	11.14	1.70	6.95	I	C	SP	PKP
SOB1	144.259	15.39	1.70	6.95	I	C	SP	PKP
ROCH	147.689	83.18	1.62	6.63	I	C	SP	PKP
LNV	147.910	85.08	1.62	6.61	I	C	SP	PKP
PEL	148.011	83.18	1.61	6.60	I	C	SP	PKP
TACH	148.095	84.21	1.61	6.59	I	C	SP	PKP
PCH	148.382	83.81	1.60	6.56	I	C	SP	PKP

Table 81. Station data for event 108.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
MAT	11.471	230.42	13.51	52.50	I	D	SP	P
SEO	18.085	255.42	12.39	46.68	I	C	LP	P
SNY	18.846	271.05	12.17	45.62	I	C	SP	P
ANP	29.520	238.62	8.97	31.79	I	C	LP	P
GUMO	30.949	188.18	8.82	31.19	I	D	LP	P
GUA	30.993	188.08	8.82	31.19	E	D	LP	P
LZH	35.212	272.29	8.56	30.18	I	C	SP	P
GTA	36.626	279.76	8.47	29.83	I	C	SP	P
CD2	37.928	264.91	8.38	29.48	I	C	SP	P
COL	39.691	36.54	8.29	29.13	E	C	LP	P
KMI	42.089	258.54	8.16	28.63	E	C	LP	P
DAV	42.510	216.03	8.13	28.52	I	C	LP	P
WMQ	43.210	291.72	8.10	28.40	I	C	SP	P
INK	45.085	30.81	7.99	27.98	I	C	SP	P
CHTO	48.874	255.16	7.74	27.03	I	C	LP	P
CHG	48.874	255.16	7.74	27.03	I	C	SP	P
KKN	52.933	274.34	7.42	25.83	I	C	SP	P
PKI	52.970	274.04	7.42	25.83	I	C	SP	P
KBS	54.375	350.70	7.30	25.38	E	C	LP	P
RSNT	54.441	34.59	7.30	25.38	E	C	LP	P
KEV	58.599	339.80	7.00	24.27	I	C	LP	P
DAG	58.849	356.78	6.96	24.12	E	C	LP	P
SES	62.743	45.20	6.68	23.10	I	C	SP	P
CTAO	64.243	183.05	6.56	22.66	E	N	LP	P
FFC	64.288	37.55	6.52	22.51	I	C	SP	P
GDH	65.413	8.71	6.43	22.18	E	C	LP	P
MHI	65.528	297.43	6.43	22.18	I	C	SP	P
POO	66.889	273.66	6.31	21.75	I	C	SP	P
KHI	67.416	296.07	6.27	21.60	I	C	LP	P
NOU	68.256	162.78	6.18	21.28	I	C	SP	P
RSSD	70.440	47.04	6.03	20.74	E	C	LP	P
RSON	70.583	36.74	6.03	20.74	E	C	LP	P
COP	73.788	336.16	5.78	19.84	E	C	LP	P
ANMO	75.426	55.32	5.68	19.48	E	C	LP	P
KRA	76.054	329.04	5.64	19.34	I	C	SP	P
KSP	76.695	331.48	5.61	19.23	I	C	SP	P
MLR	77.324	322.91	5.55	19.02	I	C	SP	P
CLL	77.385	333.55	5.55	19.02	I	C	SP	P
ANTO	78.453	315.27	5.49	18.81	I	C	LP	P
HOF	78.606	333.67	5.49	18.81	I	C	SP	P
KHC	79.074	332.09	5.45	18.67	I	C	SP	P
GRFO	79.358	333.74	5.41	18.52	I	C	LP	P
GRF	79.356	333.73	5.41	18.52	I	C	SP	P
KMR	79.809	331.21	5.36	18.35	I	C	LP	P
DMU	79.952	345.90	5.36	18.35	I	C	SP	P
DDK	80.340	345.42	5.31	18.17	I	C	SP	P
DLE	80.472	345.50	5.31	18.17	I	C	SP	P
DCN	80.548	345.95	5.31	18.17	I	C	SP	P
VTS	80.824	322.75	5.26	17.99	I	C	SP	P
LTX	81.062	57.63	5.26	17.99	I	C	SP	P

Table 81. Station data for event 108 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
MMB	81.409	321.83	5.22	17.85	I	C	SP P
OGA	81.891	332.46	5.18	17.71	I	C	SP P
SLE	81.909	334.42	5.18	17.71	E	C	LP P
GAC	81.935	29.84	5.18	17.71	I	C	LP P
SAX	82.099	335.66	5.18	17.71	E	C	LP P
SKO	82.092	323.46	5.18	17.71	I	C	SP P
ZUL	82.194	334.35	5.18	17.71	E	C	LP P
NWAO	82.292	206.69	5.14	17.57	E	C	LP P
OSS	82.340	332.91	5.14	17.57	E	C	LP P
VAL	82.393	347.32	5.14	17.57	I	C	LP P
RSNY	83.271	29.84	5.08	17.36	E	C	LP P
FLN	83.474	340.34	5.08	17.36	I	C	SP P
MMK	83.601	333.96	5.08	17.36	E	C	LP P
LOR	83.723	337.05	5.08	17.36	I	C	SP P
DIX	83.749	334.32	5.08	17.36	E	C	LP P
GRC	83.915	337.56	5.05	17.25	I	C	SP P
LBF	83.948	336.86	5.05	17.25	I	C	SP P
SSF	84.010	337.19	5.05	17.25	I	C	SP P
ATH	84.335	319.69	5.02	17.14	I	C	SP P
TCF	85.075	337.70	4.99	17.04	I	C	SP P
SCP	85.231	33.89	4.99	17.04	E	C	LP P
LSF	85.294	338.12	4.96	16.93	I	C	SP P
SSB	85.339	335.79	4.96	16.93	I	C	SP P
HLW	86.862	309.70	4.83	16.48	I	C	LP P
SHA	88.800	46.49	4.73	16.13	I	C	LP P
PTO	92.524	343.39	4.66	15.88	E	C	LP P
TOL	92.690	339.70	4.66	15.88	E	C	LP P
BNG	114.312	303.87	1.88	6.35	I	C	SP PKP
SAN	147.423	84.18	1.64	5.53	I	C	SP PKP

Table 82. Station data for event 109.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
MDJ	24.296	256.01	9.53	34.05	I	C	SP	P
COL	24.847	49.63	9.47	33.81	I	D	LP	P
MAT	26.052	231.78	9.38	33.45	I	C	SP	P
CN2	27.089	259.06	9.28	33.04	I	C	SP	P
SEO	30.684	248.23	8.86	31.37	I	C	LP	P
BTO	37.787	268.84	8.38	29.50	I	C	SP	P
SSE	38.708	247.65	8.35	29.38	I	C	LP	P
RSNT	39.558	46.23	8.29	29.15	E	N	LP	P
TATO	43.552	242.00	8.07	28.31	I	C	LP	P
KBS	44.108	352.41	8.05	28.23	E	N	LP	P
KBS	44.108	352.41	8.05	28.23	I	C	LP	P
GTA	44.301	275.73	8.02	28.12	I	C	SP	P
GUMO	44.878	206.24	7.99	28.00	I	C	LP	P
HON	44.909	124.85	7.99	28.00	I	D	LP	P
GUA	44.914	206.16	7.99	28.00	I	C	LP	P
LON	45.261	68.98	7.96	27.89	I	D	LP	P
EDM	45.342	57.06	7.96	27.89	I	D	SP	P
DAG	47.319	0.74	7.85	27.47	I	D	LP	P
SES	48.263	58.76	7.78	27.20	I	D	SP	P
SZP	50.364	237.87	7.62	26.60	I	C	SP	P
KEV	50.530	341.94	7.62	26.60	I	C	LP	P
BAG	51.292	237.01	7.54	26.30	I	C	LP	P
GDH	52.011	15.84	7.50	26.15	I	C	SP	P
JAS	52.073	76.53	7.50	26.15	E	D	LP	P
JAS1	52.098	76.53	7.50	26.15	I	D	SP	P
KMI	53.342	260.67	7.38	25.70	E	C	LP	P
RSON	55.731	48.43	7.22	25.10	E	N	LP	P
RSSD	56.065	60.16	7.18	24.95	E	D	LP	P
CGP	56.510	228.13	7.14	24.81	I	C	SP	P
DAV	57.384	226.51	7.07	24.55	I	C	LP	P
CHG	60.484	259.60	6.84	23.70	I	C	SP	P
CHTO	60.484	259.60	6.84	23.70	I	C	LP	P
KKN	60.993	277.25	6.80	23.55	I	C	SP	P
PKI	61.092	276.99	6.80	23.55	I	C	SP	P
UPP	61.204	341.19	6.80	23.55	I	C	SP	P
BDT	61.726	258.52	6.76	23.40	I	C	SP	P
ANMO	61.778	68.81	6.72	23.26	I	D	LP	P
NST	62.394	256.50	6.68	23.11	I	C	SP	P
KONO	62.691	345.48	6.68	23.11	I	C	LP	P
NDI	64.726	284.13	6.51	22.49	I	C	SP	P
MUD	65.832	344.76	6.39	22.05	I	C	SP	P
COP	66.067	342.60	6.39	22.05	I	C	SP	P
COP	66.067	342.60	6.39	22.05	I	C	LP	P
PMG	66.748	197.68	6.35	21.91	I	C	SP	P
GAC	67.062	40.75	6.31	21.76	E	N	LP	P
MHI	67.753	302.15	6.22	21.44	I	C	LP	P
MNT	67.904	39.65	6.22	21.44	I	D	SP	P
RSNY	68.398	40.77	6.18	21.29	E	N	LP	P
HAM	68.611	343.44	6.18	21.29	I	C	SP	P
SNG	69.196	250.99	6.14	21.15	I	C	SP	P

Table 82. Station data for event 109 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KHI	69.910	301.42	6.07	20.90	I	C	LP	P
KRA	69.918	335.99	6.07	20.90	I	C	SP	P
CLL	70.156	340.86	6.07	20.90	I	C	SP	P
SCP	70.340	45.09	6.03	20.75	E	N	LP	P
BRG	70.397	340.12	6.03	20.75	I	C	SP	P
WTS	70.510	345.00	6.03	20.75	I	C	SP	P
DBN	70.634	346.07	6.03	20.75	I	C	LP	P
MOX	71.043	341.55	5.99	20.61	I	C	SP	P
ETA	71.178	353.45	5.99	20.61	I	C	SP	P
HOF	71.316	341.28	5.96	20.50	I	C	SP	P
HNM	71.321	331.77	5.96	20.50	I	C	SP	P
ECB	71.542	353.78	5.96	20.50	I	C	SP	P
ECP	71.702	353.50	5.96	20.50	I	C	SP	P
UCC	72.019	346.30	5.92	20.36	E	C	LP	P
GRFO	72.032	341.53	5.92	20.36	I	C	LP	P
KHC	72.134	339.81	5.92	20.36	I	C	SP	P
TAB	72.135	312.50	5.92	20.36	I	C	LP	P
WET	72.253	340.28	5.89	20.25	I	C	SP	P
VLR	72.258	332.43	5.89	20.25	I	C	SP	P
VKA	72.404	337.72	5.89	20.25	I	C	SP	P
BUD	72.543	335.64	5.89	20.25	I	C	SP	P
ISR	72.793	329.66	5.85	20.11	I	C	SP	P
KMR	73.052	339.11	5.85	20.11	I	C	LP	P
STU	73.269	342.62	5.82	20.00	I	C	SP	P
GWF	73.324	343.72	5.82	20.00	I	C	SP	P
FUR	73.492	341.06	5.82	20.00	I	C	SP	P
BHG	73.619	339.85	5.82	20.00	I	C	SP	P
PVC	73.725	175.30	5.82	20.00	I	C	SP	P
KBA	74.144	339.34	5.78	19.85	I	C	SP	P
GAP	74.194	341.01	5.78	19.85	I	C	SP	P
SHA	74.345	58.16	5.75	19.75	E	D	LP	P
SLE	74.360	342.83	5.75	19.75	E	C	LP	P
SCE	74.497	340.44	5.75	19.75	I	C	SP	P
ZUL	74.654	342.83	5.75	19.75	E	C	LP	P
POO	74.670	280.33	5.75	19.75	I	C	SP	P
ROF	74.699	343.89	5.75	19.75	I	C	SP	P
SAX	74.716	342.12	5.75	19.75	E	C	LP	P
OGA	74.788	340.87	5.71	19.60	I	C	SP	P
PVL	75.011	329.80	5.71	19.60	I	C	SP	P
OSS	75.122	341.42	5.71	19.60	E	C	LP	P
VDL	75.435	341.83	5.68	19.50	E	C	LP	P
GRC	75.623	346.44	5.68	19.50	I	C	SP	P
ANTO	75.640	323.02	5.68	19.50	I	C	LP	P
DIM	75.909	329.07	5.64	19.35	I	C	SP	P
VTS	76.063	330.97	5.64	19.35	I	C	SP	P
PLD	76.106	329.72	5.64	19.35	I	C	SP	P
MMK	76.112	342.77	5.64	19.35	E	C	LP	P
TRT	76.177	232.42	5.64	19.35	I	C	SP	P
DIX	76.175	343.16	5.64	19.35	E	C	LP	P
EMS	76.262	343.49	5.61	19.25	E	C	LP	P

Table 82. Station data for event 109 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KDZ	76.350	329.08	5.61	19.25	I	C	SP	P
SKO	77.118	332.00	5.58	19.14	I	C	SP	P
SRS	77.332	330.13	5.55	19.03	I	C	SP	P
CTA	77.356	196.67	5.55	19.03	I	C	LP	P
CTAO	77.356	196.67	5.55	19.03	I	C	LP	P
NOU	78.200	177.28	5.52	18.93	I	C	SP	P
PAIG	78.413	329.62	5.48	18.78	I	C	SP	P
LIT	78.583	330.56	5.48	18.78	I	C	SP	P
KOD	79.419	272.53	5.41	18.54	I	C	SP	P
MLS	80.144	347.05	5.36	18.36	I	C	SP	P
PTO	82.840	354.05	5.11	17.47	E	C	LP	P
GUD	83.001	350.62	5.11	17.47	I	C	SP	P
TOL	83.746	350.45	5.08	17.37	E	C	LP	P
TOL	83.746	350.45	5.08	17.37	I	C	SP	P
HLW	85.185	319.80	4.99	17.05	I	C	LP	P
YOU	91.013	192.54	4.70	16.03	I	C	SP	P
ADE	93.214	200.24	4.64	15.82	I	C	SP	P
SJG	95.036	46.76	4.58	15.61	I	D	SP	P
ARO	96.635	301.99	4.54	15.47	I	C	LP	P
NWAQ	97.102	217.82	4.53	15.44	I	C	LP	P
TAU	99.657	192.04	4.47	15.23	I	C	LP	P
TET	125.071	295.90	1.87	6.29	I	C	SP	PKP
KRI	127.614	299.51	1.86	6.27	I	C	SP	PKP
BUL	130.928	298.37	1.85	6.23	I	C	SP	PKP
LNV	136.683	82.93	1.80	6.08	I	C	SP	PKP
PRY	137.156	294.45	1.80	6.08	I	C	SP	PKP
MAW	143.656	219.45	1.70	5.75	E	C	LP	PKP
LPA	144.730	70.62	1.68	5.68	E	C	LP	PKP
SPA	145.991	180.00	1.66	5.61	I	C	SP	PKP
CER	146.485	297.76	1.66	5.61	I	C	SP	PKP
TUH	146.504	298.01	1.64	5.53	I	C	SP	PKP

Table 83. Station data for event 126.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
MAT	24.790	230.91	9.46	41.90	I	C	SP	P
COL	26.116	48.09	9.37	41.41	I	C	LP	P
COL	26.116	48.09	9.37	41.41	I	C	SP	P
SEO	29.529	247.90	8.96	39.24	E	C	LP	P
INK	31.479	39.97	8.78	38.30	I	C	SP	P
MBC	34.615	24.40	8.58	37.28	I	C	SP	P
ALE	40.638	8.11	8.23	35.52	I	C	SP	P
ANP	42.157	241.31	8.15	35.12	E	C	LP	P
TATO	42.343	241.17	8.12	34.98	I	C	LP	P
EDM	46.584	55.51	7.90	33.90	I	C	SP	P
DAG	48.262	0.25	7.78	33.31	I	D	SP	P
DAG	48.262	0.25	7.78	33.31	E	C	LP	P
SZP	49.128	236.87	7.73	33.07	I	C	SP	P
FFC	50.725	48.19	7.61	32.50	I	C	SP	P
KEV	51.146	341.58	7.57	32.30	E	C	LP	P
KMI	52.329	259.99	7.45	31.73	E	C	LP	P
PGP	52.406	233.79	7.45	31.73	I	C	SP	P
GDH	53.143	15.02	7.41	31.54	I	C	SP	P
GDH	53.143	15.02	7.41	31.54	I	C	LP	P
MAP	53.866	228.69	7.33	31.16	I	C	SP	P
FRB	55.082	24.78	7.25	30.78	I	C	SP	P
RSON	57.002	47.10	7.10	30.08	I	C	LP	P
RSSD	57.288	58.65	7.07	29.94	E	C	LP	P
AKU	59.407	0.07	6.91	29.20	I	C	SP	P
CHTO	59.456	258.77	6.91	29.20	I	C	LP	P
UPP	61.802	340.53	6.71	28.27	I	C	SP	P
HFS	62.254	342.73	6.67	28.09	I	C	SP	P
ANMO	62.933	67.26	6.63	27.91	E	C	LP	P
KONO	63.372	344.76	6.59	27.72	I	C	LP	P
MUD	66.499	343.98	6.34	26.59	I	C	SP	P
COP	66.692	341.82	6.34	26.59	I	C	SP	P
COP	66.692	341.82	6.34	26.59	E	C	LP	P
TUL	67.629	59.12	6.26	26.23	I	C	SP	P
RLO	67.800	58.41	6.22	26.05	I	C	SP	P
EDU	67.917	351.13	6.22	26.05	I	C	SP	P
ELO	68.054	351.53	6.22	26.05	I	C	SP	P
EBH	68.257	351.38	6.18	25.87	I	C	SP	P
GAC	68.337	39.51	6.18	25.87	I	C	LP	P
EAB	68.386	351.86	6.18	25.87	I	C	SP	P
ESY	68.505	350.79	6.18	25.87	I	C	SP	P
EAU	68.652	351.28	6.18	25.87	I	C	SP	P
EBL	68.686	351.02	6.18	25.87	I	C	SP	P
MNT	69.177	38.42	6.14	25.69	I	C	SP	P
RSNY	69.673	39.53	6.10	25.51	E	C	LP	P
KRA	70.410	335.15	6.03	25.19	I	C	SP	P
KSP	70.509	337.76	6.03	25.19	I	C	SP	P
CLL	70.746	340.00	6.03	25.19	I	C	SP	P
DMU	70.854	353.11	5.99	25.02	I	D	SP	P
BRG	70.973	339.25	5.99	25.02	I	C	SP	P
SPC	71.141	334.61	5.99	25.02	I	C	SP	P

Table 83. Station data for event 126 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
DCN	71.431	353.27	5.95	24.84	I	C	SP P
DLE	71.437	352.80	5.95	24.84	I	C	SP P
SCP	71.616	43.81	5.95	24.84	I	C	LP P
MOX	71.647	340.67	5.95	24.84	I	C	SP P
PRU	71.689	338.57	5.95	24.84	I	C	SP P
JOS	71.712	334.14	5.95	24.84	I	C	SP P
HOF	71.915	340.39	5.92	24.70	I	C	SP P
TAB	72.117	311.65	5.92	24.70	I	C	LP P
HYB	72.193	274.92	5.92	24.70	I	C	SP P
ECB	72.370	352.84	5.88	24.53	I	C	SP P
ENN	72.510	344.36	5.88	24.53	I	C	SP P
ECP	72.525	352.55	5.88	24.53	I	C	SP P
GRFO	72.635	340.63	5.88	24.53	I	C	LP P
GRF	72.634	340.62	5.88	24.53	I	C	SP P
MEM	72.650	344.27	5.88	24.53	I	C	SP P
KHC	72.703	338.91	5.88	24.53	I	C	SP P
UCC	72.713	345.38	5.88	24.53	E	C	LP P
PSJ	72.724	248.92	5.88	24.53	I	C	SP P
ZST	72.817	336.28	5.85	24.39	I	C	SP P
WET	72.832	339.37	5.85	24.39	I	C	SP P
SRO	72.892	335.34	5.85	24.39	I	C	SP P
VKA	72.931	336.82	5.85	24.39	I	C	SP P
BUD	73.028	334.75	5.85	24.39	I	C	SP P
BLA	73.613	47.56	5.81	24.21	E	C	LP P
GWF	73.969	342.78	5.78	24.08	I	C	SP P
PSN	73.971	327.02	5.78	24.08	I	C	SP P
POO	73.974	279.37	5.78	24.08	I	C	SP P
GZR	73.994	331.42	5.78	24.08	I	C	SP P
FUR	74.085	340.12	5.78	24.08	I	C	SP P
BUH	74.157	342.30	5.78	24.08	I	C	SP P
BHG	74.188	338.92	5.78	24.08	I	C	SP P
CDF	74.575	342.86	5.74	23.90	I	C	SP P
KBA	74.704	338.40	5.74	23.90	I	C	SP P
BSF	75.218	343.04	5.71	23.77	I	C	SP P
FLN	75.345	348.15	5.67	23.60	I	C	SP P
PVL	75.373	328.86	5.67	23.60	I	D	SP P
KOU	75.512	177.83	5.67	23.60	I	C	SP P
SHA	75.580	56.80	5.67	23.60	E	C	LP P
GRR	75.757	348.33	5.64	23.46	I	C	SP P
TRI	75.916	337.67	5.64	23.46	I	C	SP P
CTI	76.038	339.23	5.64	23.46	I	C	SP P
LPF	76.130	348.39	5.64	23.46	I	C	SP P
CTAO	76.218	195.27	5.64	23.46	I	C	LP P
CTA	76.218	195.27	5.64	23.46	I	C	LP P
LOR	76.231	344.89	5.64	23.46	I	C	SP P
VTS	76.449	330.01	5.61	23.33	I	C	SP P
SSF	76.485	345.09	5.61	23.33	I	C	SP P
LBF	76.490	344.75	5.61	23.33	I	C	SP P
SAL	76.685	339.88	5.61	23.33	I	C	SP P
AVF	76.773	345.14	5.58	23.20	I	C	SP P

Table 83. Station data for event 126 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SMF	76.842	344.77	5.58	23.20	I	C	SP	P
BGF	77.074	345.43	5.58	23.20	I	C	SP	P
ORO	77.148	341.65	5.58	23.20	I	D	SP	P
MMB	77.227	329.23	5.58	23.20	I	D	SP	P
TCF	77.428	345.82	5.55	23.07	I	C	SP	P
MFF	77.431	347.52	5.55	23.07	I	C	SP	P
- MZF	77.446	345.54	5.55	23.07	I	C	SP	P
SKO	77.526	331.00	5.55	23.07	I	C	SP	P
LSF	77.560	346.29	5.55	23.07	I	C	SP	P
VAY	77.809	329.95	5.51	22.89	I	C	SP	P
WB2	78.508	206.49	5.48	22.76	I	C	SP	P
KOD	78.583	271.45	5.48	22.76	I	C	SP	P
CAF	78.783	345.64	5.45	22.63	I	C	SP	P
LFF	78.952	346.59	5.45	22.63	I	C	SP	P
LPO	79.144	346.22	5.45	22.63	I	C	SP	P
MNS	79.318	337.40	5.41	22.45	I	C	SP	P
FRF	79.385	342.06	5.41	22.45	I	C	SP	P
LRG	79.538	342.24	5.41	22.45	I	C	SP	P
LMR	79.629	342.11	5.41	22.45	I	C	SP	P
RMP	79.862	337.21	5.35	22.19	I	C	SP	P
CVF	79.934	340.21	5.35	22.19	I	C	SP	P
SGO	80.448	334.92	5.30	21.97	I	C	SP	P
ORI	80.646	333.92	5.30	21.97	I	C	SP	P
EPF	80.881	346.52	5.25	21.75	I	C	SP	P
ADI	80.966	317.11	5.25	21.75	I	C	SP	P
JER	82.132	316.52	5.17	21.41	I	C	SP	P
ASPA	82.186	205.88	5.17	21.41	I	C	SP	P
PRN1	83.473	316.01	5.08	21.02	I	C	SP	P
MTE	84.321	352.02	5.02	20.76	I	C	SP	P
TOL	84.514	349.29	5.02	20.76	E	C	LP	P
TOL	84.514	349.29	5.02	20.76	I	C	SP	P
HLW	85.326	318.64	4.96	20.50	I	C	SP	P
PRL	85.391	351.77	4.96	20.50	I	C	SP	P
MTH	85.941	353.15	4.90	20.24	I	C	SP	P
WBN	86.547	211.50	4.86	20.07	I	C	SP	P
CRT	87.125	348.56	4.82	19.89	I	C	SP	P
MAL	87.673	349.14	4.80	19.81	I	C	SP	P
AVE	91.364	351.18	4.68	19.29	I	C	SP	P
KLG	92.465	214.09	4.66	19.21	I	D	SP	P
NWA0	95.832	216.57	4.55	18.74	E	C	LP	P
SNZO	96.775	170.43	4.53	18.65	E	C	LP	P
BNG	113.335	319.76	1.89	7.66	I	C	SP	PKP
LPB	125.725	65.09	1.86	7.56	E	C	LP	PKP
LSZ	126.698	299.77	1.86	7.55	I	D	SP	PKP
BUL	130.583	296.04	1.85	7.49	I	D	SP	PKP
ITR	130.879	27.20	1.85	7.49	I	C	SP	PKP
PRY	136.725	291.89	1.80	7.31	I	C	SP	PKP
SUR	144.559	293.97	1.68	6.83	I	C	SP	PKP

Table 84. Station data for event 137.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
NEM	1.274	218.19	9.64	133.84	I	C	SP	P
KUS	2.134	231.34	11.86	117.48	I	C	SP	P
OBI	2.873	241.70	12.65	108.89	I	C	SP	P
ASA	3.146	261.15	12.82	106.47	I	D	SP	P
URA	3.577	233.88	13.01	103.28	I	C	SP	P
WAK	3.711	288.69	13.06	102.22	I	D	SP	P
SAP	4.074	253.60	13.16	100.00	I	C	SP	P
HAC	5.381	226.74	13.34	93.61	I	C	SP	P
MIY	5.848	218.36	13.36	92.12	I	C	SP	P
UTS	9.345	215.93	13.23	81.68	I	C	SP	P
TSK	9.533	213.89	13.21	81.21	I	C	SP	P
MAT	10.101	222.48	13.15	79.76	I	C	SP	P
SEO	16.328	252.33	12.27	66.64	I	D	LP	P
SSE	23.988	245.20	9.47	45.09	I	D	LP	P
ADK	25.396	59.63	9.34	44.30	I	C	SP	P
ANP	27.960	235.21	9.05	42.61	E	D	LP	P
LZH	33.412	270.73	8.60	40.05	I	D	LP	P
SZP	34.616	227.88	8.53	39.66	I	C	SP	P
BAG	35.497	226.62	8.48	39.36	I	D	LP	P
TTA	37.203	39.57	8.38	38.80	I	C	SP	P
BRW	38.128	25.85	8.32	38.49	I	C	SP	P
IMA	38.399	34.53	8.30	38.40	I	C	SP	P
KDC	39.169	47.86	8.27	38.21	I	C	SP	P
COL	40.835	36.43	8.18	37.71	I	C	SP	P
COL	40.835	36.43	8.18	37.71	I	C	LP	P
PNL	45.509	43.14	7.92	36.32	I	C	SP	P
INK	46.081	30.54	7.88	36.14	I	C	SP	P
MOM	46.170	178.98	7.88	36.11	I	D	SP	P
CHTO	47.116	253.04	7.82	35.81	E	D	LP	P
CHTO	47.116	253.04	7.82	35.81	I	D	SP	P
SHIO	47.727	265.76	7.78	35.60	I	D	LP	P
SIT	48.342	45.68	7.73	35.33	I	C	SP	P
NST	48.508	248.97	7.72	35.26	I	D	SP	P
PKI	51.175	272.43	7.50	34.15	I	D	SP	P
DMN	51.370	272.68	7.49	34.07	I	D	SP	P
PMG	53.485	179.40	7.32	33.20	I	D	SP	P
KBS	54.164	350.24	7.26	32.92	E	C	LP	P
KBS	54.164	350.24	7.26	32.92	I	C	SP	P
MKS	55.052	213.73	7.20	32.61	I	C	SP	P
PHC	55.246	50.53	7.19	32.53	I	C	SP	P
YKC	55.577	33.81	7.16	32.40	I	C	SP	P
IPM	56.261	238.99	7.11	32.15	I	D	SP	P
KGM	56.913	234.96	7.06	31.90	I	D	SP	P
MTN	58.631	197.82	6.94	31.26	I	D	SP	P
PNT	60.259	48.78	6.81	30.61	I	C	SP	P
LON	60.498	52.17	6.79	30.52	I	C	LP	P
EDM	61.213	42.52	6.73	30.23	I	C	SP	P
KJF	61.700	334.22	6.69	30.04	I	C	SP	P
NEW	62.216	48.67	6.65	29.84	I	C	SP	P
HYB	62.448	267.78	6.63	29.74	I	D	SP	P

Table 84. Station data for event 137 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
YKM	62.612	47.50	6.62	29.68	I	C	SP P
FHC	62.650	58.73	6.62	29.67	I	C	SP P
RXF	62.920	47.23	6.59	29.56	I	C	SP P
LHD	63.056	47.97	6.58	29.50	I	C	SP P
LDM	63.066	47.69	6.58	29.50	I	C	SP P
CLX	63.313	47.82	6.56	29.40	I	C	SP P
WDC	63.665	58.19	6.53	29.27	I	C	SP P
MHI	63.958	296.10	6.51	29.15	I	C	SP P
CTA	64.099	180.43	6.50	29.09	I	D	SP P
PVC	64.856	157.15	6.44	28.80	I	D	SP P
POO	65.093	271.99	6.42	28.71	I	D	SP P
NUR	65.364	332.51	6.40	28.60	I	C	SP P
FFC	65.444	36.45	6.39	28.57	I	C	SP P
BKS	65.492	60.41	6.39	28.55	I	C	SP P
GDH	65.759	7.76	6.36	28.41	E	C	LP P
GDH	65.759	7.76	6.36	28.41	I	C	SP P
HRY	65.998	47.58	6.34	28.30	I	C	SP P
MHC	66.193	60.55	6.32	28.22	I	C	SP P
LRM	66.235	48.63	6.32	28.20	I	C	SP P
JAS1	66.588	59.39	6.29	28.07	I	C	SP P
SAO	66.674	60.94	6.28	28.04	I	C	SP P
SXM	66.690	47.75	6.28	28.03	I	C	SP P
PRI	67.554	61.03	6.21	27.70	I	C	SP P
MNA	67.656	57.75	6.21	27.66	I	C	SP P
KOD	68.053	262.77	6.17	27.51	I	D	SP P
UPP	68.099	335.01	6.17	27.49	I	C	SP P
ASPA	68.663	192.56	6.12	27.27	I	D	SP P
AKU	69.689	353.34	6.05	26.93	I	C	SP P
RMQ	70.495	178.01	5.99	26.61	I	D	SP P
TAB	70.982	304.78	5.96	26.48	I	C	LP P
ODD	71.034	339.99	5.96	26.46	I	C	SP P
RSON	71.717	35.47	5.90	26.21	I	C	LP P
RSSD	71.806	45.69	5.90	26.20	I	C	LP P
KMY	72.030	340.29	5.89	26.13	I	C	SP P
WBN	72.495	198.89	5.85	25.94	I	D	SP P
COP	73.122	334.91	5.81	25.76	I	C	SP P
MUD	73.413	336.96	5.78	25.64	I	C	SP P
COO	74.695	175.33	5.70	25.22	I	D	SP P
CLI	74.879	321.46	5.69	25.17	I	C	SP P
MEK	75.141	205.89	5.67	25.10	I	D	SP P
KRA	75.184	327.69	5.67	25.08	I	C	SP P
LHC	75.437	34.77	5.65	25.02	I	C	SP P
CMS	75.452	180.74	5.65	25.01	I	D	SP P
CFR	75.522	320.07	5.65	24.99	I	C	SP P
VRI	75.649	321.32	5.64	24.95	J	C	SP P
SPC	75.763	326.99	5.63	24.89	I	C	SP P
BRD	75.773	320.90	5.63	24.89	I	C	SP P
HAM	75.781	334.99	5.63	24.89	I	C	SP P
KSP	75.893	330.13	5.62	24.85	I	C	SP P
STK	75.983	184.45	5.61	24.82	I	D	SP P

Table 84. Station data for event 137 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
TLB	76.030	319.74	5.61	24.80	I	C	SP P
JOS	76.204	326.41	5.60	24.75	I	C	SP P
ISR	76.292	320.93	5.59	24.73	I	C	SP P
ELO	76.525	343.61	5.58	24.66	I	C	SP P
CLL	76.641	332.18	5.57	24.63	I	C	SP P
PSN	76.650	319.05	5.57	24.63	I	C	SP P
BRG	76.690	331.42	5.57	24.61	I	C	SP P
EBH	76.692	343.42	5.57	24.61	I	C	SP P
ESY	76.813	342.82	5.56	24.58	I	C	SP P
EAB	76.916	343.84	5.55	24.55	I	C	SP P
ED1	76.928	343.13	5.55	24.55	I	C	SP P
ANMO	76.946	53.80	5.55	24.54	I	C	LP P
ALQ	76.948	53.81	5.55	24.54	I	C	SP P
EBL	77.038	342.99	5.55	24.52	I	C	SP P
EAU	77.057	343.24	5.55	24.51	I	C	SP P
COZ	77.132	322.29	5.54	24.49	I	C	SP P
PRU	77.227	330.60	5.54	24.46	I	C	SP P
ANTO	77.230	313.81	5.53	24.46	I	C	LP P
CGN	77.289	320.61	5.53	24.44	I	C	SP P
WIT	77.312	336.42	5.53	24.43	I	C	SP P
BUD	77.622	326.64	5.51	24.35	I	C	SP P
SRO	77.632	327.24	5.51	24.34	I	C	SP P
MOX	77.668	332.58	5.51	24.33	I	C	SP P
ZST	77.782	328.14	5.50	24.31	I	C	SP P
WTS	77.992	335.95	5.49	24.25	I	C	SP P
CLO	77.997	323.02	5.49	24.24	I	C	SP P
VKA	78.020	328.63	5.49	24.24	I	C	SP P
KLG	78.214	201.99	5.47	24.17	I	D	SP P
DMK	78.274	318.06	5.47	24.13	I	C	SP P
KHC	78.288	330.66	5.46	24.13	I	C	SP P
DBN	78.367	336.91	5.46	24.10	E	C	LP P
MRWA	78.376	207.08	5.46	24.09	I	D	SP P
SOP	78.412	328.16	5.45	24.08	I	C	SP P
CTT	78.464	317.23	5.45	24.06	I	C	SP P
PVL	78.460	320.43	5.45	24.06	I	C	SP P
WET	78.520	331.07	5.45	24.04	I	C	SP P
GRF	78.617	332.30	5.44	24.01	I	C	LP P
GRF	78.617	332.30	5.44	24.01	I	C	SP P
KMR	78.998	329.76	5.42	23.91	I	C	LP P
TNS	79.053	334.15	5.41	23.89	I	C	SP P
KCT	79.187	316.68	5.40	23.84	I	C	SP P
ADE	79.250	186.65	5.40	23.81	I	D	SP P
CAN	79.300	178.06	5.39	23.77	I	D	SP P
ENN	79.340	335.86	5.38	23.75	I	C	SP P
EDC	79.354	317.04	5.38	23.75	I	C	SP P
PLD	79.490	320.05	5.37	23.68	I	C	SP P
DMU	79.577	344.47	5.36	23.63	I	C	SP P
BHG	79.731	330.30	5.34	23.55	I	C	SP P
UCC	79.763	336.78	5.33	23.52	E	C	LP P
FUR	79.911	331.47	5.32	23.44	I	C	SP P

Table 84. Station data for event 137 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
KLB	80.028	204.76	5.31	23.38	I	D	SP P
STU	80.082	333.00	5.30	23.36	I	C	SP P
DLE	80.085	344.05	5.30	23.35	I	C	SP P
KBA	80.110	329.68	5.30	23.34	I	C	SP P
DCN	80.174	344.49	5.29	23.31	I	C	SP P
DOU	80.325	336.32	5.28	23.24	E	C	LP P
MMB	80.345	320.31	5.27	23.23	I	C	SP P
GWF	80.405	334.02	5.27	23.21	I	C	SP P
ETA	80.578	343.66	5.25	23.14	I	C	SP P
ECB	81.004	343.89	5.22	22.97	I	C	SP P
CDF	81.012	333.95	5.22	22.97	I	C	SP P
SKO	81.070	321.93	5.21	22.95	I	C	SP P
VAY	81.086	320.85	5.21	22.94	I	C	SP P
TRJ	81.117	328.70	5.21	22.93	I	C	SP P
SLE	81.189	332.91	5.20	22.91	I	C	SP P
SAX	81.357	332.15	5.19	22.84	I	C	SP P
NWAO	81.430	204.71	5.18	22.81	E	N	LP P
ZUL	81.472	332.84	5.18	22.80	I	C	SP P
TOO	81.524	180.94	5.18	22.78	I	D	SP P
OCO	81.523	47.92	5.18	22.78	I	C	SP P
OSS	81.576	331.39	5.17	22.77	I	C	SP P
CTI	81.599	330.15	5.17	22.76	I	C	SP P
HAU	81.662	334.32	5.17	22.74	I	C	SP P
BSF	81.677	333.97	5.17	22.74	I	C	SP P
LLS	81.807	332.17	5.16	22.71	I	C	LP P
JER	81.888	306.80	5.16	22.69	I	C	SP P
VDL	81.980	331.69	5.15	22.66	I	C	SP P
TUL	82.115	46.61	5.14	22.62	J	C	LP P
RLO	82.317	45.96	5.13	22.57	I	C	SP P
SAL	82.378	330.61	5.13	22.55	I	C	SP P
RKG	82.561	204.47	5.12	22.50	J	D	SP P
MMK	82.867	332.40	5.10	22.41	I	C	SP P
GAC	82.888	28.29	5.10	22.41	I	C	LP P
FLN	82.928	338.79	5.09	22.40	I	C	SP P
LDF	82.989	338.51	5.09	22.38	I	C	SP P
DIX	83.025	332.76	5.09	22.37	I	C	SP P
EMS	83.191	333.05	5.08	22.32	I	C	LP P
ORO	83.237	332.19	5.07	22.31	I	C	SP P
LBF	83.299	335.30	5.07	22.29	I	C	SP P
GRR	83.370	338.88	5.07	22.27	I	C	SP P
SSF	83.370	335.62	5.07	22.27	I	C	SP P
SMF	83.645	335.23	5.05	22.20	I	C	SP P
AVF	83.660	335.60	5.05	22.19	I	C	SP P
MNT	83.685	27.23	5.05	22.19	I	C	SP P
LPF	83.747	338.85	5.04	22.17	I	C	SP P
BHO	83.774	47.01	5.04	22.17	I	C	SP P
BRT	83.798	323.92	5.04	22.16	I	C	SP P
BGF	84.019	335.82	5.03	22.09	I	C	SP P
AQU	84.101	327.13	5.02	22.06	I	C	SP P
RSNY	84.224	28.25	5.01	22.02	I	C	LP P

Table 84. Station data for event 137 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
MNS	84.353	327.61	5.00	21.96	I	C	SP P
MZF	84.407	335.84	5.00	21.95	I	C	SP P
TCF	84.450	336.10	4.99	21.93	I	C	SP P
VLS	84.520	320.21	4.99	21.91	I	C	SP P
LSF	84.681	336.52	4.98	21.86	I	C	SP P
- OR1	84.805	323.94	4.97	21.84	I	C	SP P
- MFF	84.826	337.73	4.97	21.83	I	C	SP P
- SGO	84.855	324.95	4.97	21.82	I	C	SP P
- FRF	85.507	332.06	4.92	21.58	I	C	SP P
- RJF	85.547	336.14	4.91	21.56	I	C	SP P
- CVF	85.610	330.15	4.91	21.53	I	C	SP P
- LRG	85.697	332.20	4.90	21.50	I	C	SP P
- CAF	85.730	335.63	4.90	21.48	I	C	SP P
- LMR	85.754	332.04	4.89	21.46	I	C	SP P
- LFF	86.104	336.49	4.86	21.32	I	C	SP P
- LPO	86.209	336.10	4.85	21.28	I	C	SP P
- SCP	86.289	32.25	4.84	21.25	I	C	LP P
- TAU	86.852	179.52	4.81	21.08	E	D	LP P
- EPF	87.968	335.99	4.75	20.82	I	C	SP P
- BLA	88.330	35.80	4.73	20.74	I	C	LP P
- SNZO	88.893	159.25	4.72	20.68	E	D	LP P
- SHA	90.151	44.75	4.70	20.58	I	C	LP P
- PTO	92.066	341.57	4.66	20.40	E	C	LP P
- TOL	92.120	337.87	4.66	20.39	I	C	LP P
- EVA	127.367	267.87	1.86	8.00	I	C	SP PKP
- SLR	127.475	269.19	1.86	8.00	I	C	SP PKP
- BPI	127.920	268.92	1.86	7.99	I	C	SP PKP
- KSR	128.547	270.01	1.86	7.98	I	D	SP PKP
- BFS	129.245	269.03	1.85	7.97	I	D	SP PKP
- SEK	129.478	266.98	1.85	7.97	I	C	SP PKP
- BLF	130.960	267.10	1.85	7.94	I	C	SP PKP
- ANT	143.434	68.08	1.71	7.36	I	C	SP PKP
- SOB1	144.398	12.89	1.69	7.28	I	C	SP PKP

Table 85. Station data for event 153.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
MAT	18.087	233.79	12.34	60.35	I	C	LP P
SEO	24.048	252.98	9.59	42.48	I	C	LP P
BJI	29.697	267.96	8.96	39.12	E	C	LP P
SSE	31.884	249.21	8.74	37.99	I	C	LP P
COL	33.151	40.23	8.68	37.68	I	C	LP P
ANP	36.004	241.64	8.50	36.77	I	C	LP P
TATO	36.180	241.44	8.50	36.77	I	C	LP P
GUMO	36.431	198.99	8.47	36.62	E	D	LP P
GUA	36.470	198.90	8.47	36.62	E	C	LP P
INK	38.694	34.02	8.35	36.02	I	C	SP P
MBC	41.857	20.91	8.15	35.03	I	C	SP P
BAG	43.516	234.53	8.07	34.63	E	C	LP P
HON	45.435	110.60	7.96	34.10	I	D	LP P
MAP	46.951	226.10	7.87	33.66	I	C	SP P
KMI	47.751	260.25	7.81	33.37	E	C	LP P
RSNT	47.937	38.73	7.81	33.37	I	C	LP P
KBS	50.737	351.64	7.61	32.41	I	C	LP P
PNT	52.224	55.44	7.49	31.83	I	C	SP P
LON	52.447	59.17	7.45	31.64	E	D	LP P
RAB	52.962	185.20	7.41	31.46	I	D	LP P
EDM	53.289	48.60	7.37	31.27	I	C	SP P
YKM	54.591	54.08	7.29	30.89	I	C	SP P
CHG	54.702	257.85	7.29	30.89	I	C	SP P
CHTO	54.702	257.85	7.29	30.89	I	C	LP P
RXF	54.903	53.80	7.25	30.70	I	C	SP P
LHD	55.030	54.60	7.25	30.70	I	C	SP P
CLX	55.288	54.44	7.21	30.51	I	C	SP P
WDC	55.659	65.71	7.21	30.51	I	D	SP P
KEV	56.060	341.06	7.18	30.37	I	C	LP P
SES	56.111	50.38	7.18	30.37	I	C	SP P
NST	56.257	254.28	7.14	30.19	I	C	SP P
KKN	57.436	276.14	7.07	29.86	I	C	SP P
PKI	57.498	275.86	7.07	29.86	I	C	SP P
BKS	57.527	68.06	7.07	29.86	E	D	LP P
DMN	57.672	276.10	7.07	29.86	I	C	SP P
FFC	57.722	42.22	7.07	29.86	I	C	SP P
JAS	58.578	66.93	6.99	29.49	I	D	LP P
GDH	60.163	11.81	6.88	28.98	I	C	LP P
GDH	60.163	11.81	6.88	28.98	I	D	SP P
KTG	61.027	359.35	6.80	28.61	I	C	SP P
SNG	62.464	247.60	6.67	28.02	I	C	LP P
MKS	62.719	222.23	6.67	28.02	I	C	SP P
RSSD	63.811	52.31	6.55	27.47	I	D	LP P
RSON	64.030	41.50	6.55	27.47	I	C	LP P
GOL	66.159	56.58	6.39	26.74	E	D	LP P
QUE	67.550	290.47	6.26	26.16	I	C	SP P
MHI	67.721	299.91	6.26	26.16	I	C	LP P
AFI	68.589	146.56	6.18	25.80	E	D	LP P
ANMO	68.897	60.88	6.14	25.62	I	D	LP P
HYB	69.092	272.74	6.14	25.62	I	C	SP P

Table 85. Station data for event 153 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
CTAO	69.223	190.13	6.14	25.62	I	D	LP P
CTA	69.223	190.13	6.14	25.62	I	C	SP P
WB2	71.248	201.83	5.99	24.95	I	C	SP P
POO	71.384	276.99	5.95	24.77	I	C	SP P
COP	71.537	339.40	5.95	24.77	I	C	LP P
COP	71.537	339.40	5.95	24.77	I	D	SP P
MUD	71.542	341.49	5.95	24.77	I	D	SP P
IR2	72.978	304.82	5.85	24.33	I	C	SP P
TUL	74.104	53.45	5.78	24.02	E	C	LP P
HAM	74.156	339.88	5.78	24.02	I	C	SP P
BRN	74.333	337.56	5.74	23.84	I	C	SP P
KRA	74.580	332.53	5.74	23.84	I	C	SP P
KSP	74.941	335.05	5.71	23.71	I	C	SP P
SPC	75.250	331.93	5.68	23.58	I	C	SP P
CLL	75.397	337.20	5.68	23.58	I	C	SP P
GAC	75.550	34.67	5.68	23.58	I	C	LP P
BRG	75.550	336.46	5.68	23.58	I	C	SP P
JOS	75.769	331.41	5.64	23.40	I	C	SP P
MOX	76.357	337.76	5.61	23.27	I	C	LP P
DBN	76.453	342.17	5.61	23.27	I	C	LP P
HOF	76.597	337.47	5.61	23.27	I	C	SP P
RSNY	76.885	34.71	5.58	23.14	I	C	LP P
SRO	77.066	332.44	5.58	23.14	I	C	SP P
ZST	77.087	333.36	5.58	23.14	I	C	SP P
BNS	77.104	340.57	5.58	23.14	I	C	SP P
BUD	77.140	331.85	5.58	23.14	I	C	SP P
KHC	77.237	335.94	5.58	23.14	I	C	SP P
PSN	77.240	324.19	5.58	23.14	I	C	SP P
VKA	77.256	333.88	5.55	23.01	I	C	SP P
GRFO	77.337	337.62	5.55	23.01	I	C	LP P
GRF	77.336	337.62	5.55	23.01	I	C	SP P
WET	77.410	336.38	5.55	23.01	I	C	SP P
STB	77.524	340.64	5.55	23.01	I	C	SP P
MEM	77.691	341.16	5.55	23.01	I	C	SP P
SOP	77.709	333.47	5.55	23.01	I	C	SP P
ETA	77.736	349.23	5.55	23.01	I	C	SP P
UCC	77.854	342.24	5.52	22.88	E	C	LP P
CLO	78.018	328.32	5.52	22.88	I	C	SP P
KMR	78.066	335.14	5.52	22.88	I	C	LP P
ECB	78.130	349.51	5.52	22.88	I	C	SP P
ECP	78.262	349.22	5.48	22.70	I	C	SP P
DOU	78.473	341.86	5.48	22.70	E	C	LP P
STU	78.689	338.52	5.48	22.70	I	C	LP P
STU	78.689	338.52	5.48	22.70	I	C	LP P
SCP	78.733	38.89	5.48	22.70	I	C	LP P
FUR	78.731	336.98	5.48	22.70	I	C	SP P
PVL	78.838	325.83	5.45	22.57	I	C	SP P
VAL	78.926	351.58	5.45	22.57	I	C	LP P
KBA	79.177	335.23	5.45	22.57	I	C	SP P
SLE	79.797	338.60	5.35	22.13	E	C	LP P

Table 85. Station data for event 153 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
WES	79.937	33.79	5.35	22.13	I	C	LP P
OGA	79.995	336.63	5.35	22.13	I	C	SP P
KCT	80.080	322.23	5.35	22.13	I	C	SP P
BNT	80.165	322.57	5.35	22.13	I	C	SP P
TRI	80.311	334.40	5.30	21.92	I	C	SP P
ALT	80.364	320.42	5.30	21.92	I	C	SP P
BLA	80.613	42.59	5.30	21.92	I	C	LP P
MMB	80.721	325.98	5.30	21.92	I	C	SP P
SKO	81.213	327.68	5.26	21.74	I	C	SP P
SAL	81.293	336.47	5.21	21.52	I	C	SP P
GRC	81.450	341.95	5.21	21.52	I	C	SP P
IZM	82.100	321.98	5.17	21.35	I	C	SP P
SHA	82.170	51.69	5.17	21.35	E	C	LP P
MZF	82.581	341.95	5.14	21.22	I	C	SP P
LSF	82.760	342.67	5.11	21.09	I	C	SP P
DUI	83.799	332.26	5.05	20.83	I	C	SP P
ATH	83.873	324.20	5.05	20.83	I	C	SP P
LRG	84.360	338.51	5.02	20.70	I	C	SP P
LMR	84.438	338.37	5.02	20.70	I	C	SP P
ORI	84.627	330.21	5.02	20.70	I	C	SP P
ADE	84.922	194.45	4.99	20.57	I	D	SP P
ADE	84.922	194.45	4.99	20.57	I	C	SP P
TPM	85.114	66.79	4.99	20.57	I	D	SP P
III	85.330	67.47	4.96	20.44	I	D	SP P
HLW	87.535	314.57	4.80	19.76	I	C	SP P
MUN	88.085	213.23	4.77	19.63	I	C	LP P
NWAQ	88.578	212.04	4.75	19.54	I	C	LP P
PTO	89.400	348.67	4.71	19.37	I	C	SP P
TOL	89.947	345.02	4.71	19.37	I	C	SP P
SNZO	91.243	166.26	4.69	19.29	E	D	LP P
TAU	91.731	186.61	4.68	19.24	E	D	LP P
SFS	93.642	345.97	4.63	19.03	I	C	SP P
ARO	96.245	295.27	4.55	18.69	I	C	LP P
SJG	103.367	41.31	4.45	18.26	E	C	LP Pdf
UPA	104.455	57.61	4.45	18.26	I	C	LP Pdf
NAI	109.994	292.22	1.89	7.65	I	C	LP PKP
BOG	111.069	55.39	1.89	7.65	E	C	LP PKP
KRI	126.450	287.36	1.86	7.54	I	D	SP PKP
SBA	126.608	177.26	1.86	7.53	I	C	SP PKP
BUL	129.538	285.46	1.85	7.49	I	D	SP PKP
BUL	129.538	285.46	1.85	7.49	E	C	LP PKP
PEL	141.846	83.46	1.74	7.03	I	C	LP PKP
SUR	143.020	279.71	1.72	6.97	I	D	SP PKP
LPA	151.202	73.85	1.53	6.18	E	C	LP PKP

Table 86. Station data for event 206.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
ABJ	2.562	212.13	9.38	130.91	I	C	SP P
NEM	2.903	188.45	9.96	126.66	I	C	SP P
WAK	3.242	257.60	10.42	122.94	I	D	SP P
KUS	3.464	202.12	10.67	120.67	I	C	SP P
ASA	3.629	229.29	10.85	119.08	I	C	SP P
OBI	3.900	213.76	11.09	116.68	I	C	SP P
RMJ	3.925	236.61	11.11	116.47	I	C	SP P
SAP	4.670	229.43	11.60	110.79	I	C	SP P
URA	4.721	212.30	11.63	110.44	I	C	SP P
HAK	5.871	223.58	12.07	103.45	I	C	SP P
HAC	6.606	212.45	12.23	99.92	I	C	SP P
AOM	6.656	217.94	12.23	99.68	I	C	SP P
MIY	7.242	206.67	12.32	96.97	I	C	SP P
MAT	11.347	214.54	12.31	82.78	I	C	SP P
CN2	14.854	268.17	11.41	66.79	I	C	SP P
SHK	15.518	226.06	11.06	63.04	E	C	LP P
SEO	16.672	245.67	10.50	57.81	E	C	LP P
SNY	16.815	263.05	10.47	57.53	I	C	SP P
ADK	24.808	63.14	9.27	48.30	I	C	SP P
HHC	25.524	270.44	9.21	47.88	I	C	SP P
ANP	28.792	231.70	8.83	45.34	E	D	LP P
TATO	28.973	231.48	8.82	45.26	E	D	LP P
QZH	30.617	235.62	8.70	44.49	I	C	SP P
XAN	30.690	260.01	8.69	44.46	I	C	SP P
GUMO	32.525	182.36	8.58	43.75	E	D	LP P
GTA	34.284	275.55	8.49	43.14	I	C	SP P
TTA	36.007	41.20	8.38	42.49	I	C	SP P
CD2	36.054	260.07	8.38	42.47	I	C	SP P
BRW	36.611	27.00	8.35	42.26	I	C	SP P
IMA	37.075	35.94	8.32	42.09	I	C	SP P
KDC	38.199	49.55	8.26	41.74	I	C	SP P
COL	39.556	37.74	8.19	41.30	E	C	LP P
FBA	39.556	37.74	8.19	41.30	I	C	SP P
BCPM	44.204	43.99	7.93	39.74	I	C	SP P
INK	44.660	31.43	7.92	39.63	I	C	SP P
SIT	47.302	46.77	7.74	38.58	I	C	SP P
ALE	50.729	4.65	7.47	36.99	I	C	SP P
KKN	50.730	270.89	7.47	36.99	I	C	SP P
PKI	50.776	270.58	7.46	36.97	I	C	SP P
DMN	50.963	270.83	7.45	36.88	I	C	SP P
KBS	52.265	349.91	7.34	36.28	I	C	LP P
BGA	52.728	168.72	7.31	36.09	I	D	SP P
YKC	54.227	34.40	7.20	35.43	I	C	SP P
PMG	55.357	178.82	7.11	34.97	I	D	SP P
NDI	55.762	277.27	7.09	34.84	I	C	SP P
KEV	56.183	338.54	7.06	34.68	E	C	LP P
MKS	56.426	212.49	7.04	34.55	I	D	SP P
DAG	56.939	355.90	7.00	34.33	I	C	SP P
TRO	58.221	340.86	6.91	33.81	I	C	LP P
PNT	59.300	49.38	6.82	33.33	I	C	SP P

Table 86. Station data for event 206 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
EDM	60.079	43.02	6.76	32.99	I	C	SP P
COR	60.088	55.53	6.76	32.98	I	C	SP P
NEW	61.253	49.20	6.66	32.48	I	C	SP P
YKM	61.615	48.00	6.64	32.33	I	C	SP P
RXF	61.916	47.73	6.61	32.19	I	C	SP P
FHC	61.988	59.31	6.61	32.16	I	C	SP P
LDM	62.075	48.18	6.60	32.13	I	C	SP P
HYB	62.193	266.44	6.59	32.07	I	C	SP P
CLX	62.325	48.31	6.58	32.02	I	C	SP P
SES	62.980	44.48	6.53	31.72	I	C	SP P
WDC	62.986	58.74	6.52	31.72	I	C	SP P
NUR	63.549	331.89	6.48	31.47	I	C	SP P
MIN	63.688	58.44	6.47	31.41	I	C	SP P
GDH	63.956	7.69	6.45	31.30	E	C	LP P
GDH	63.956	7.69	6.45	31.30	I	C	SP P
FFC	64.153	36.75	6.43	31.21	I	C	SP P
ORV	64.252	59.06	6.42	31.17	I	C	SP P
POO	64.698	270.77	6.39	30.98	I	C	SP P
KHI	64.742	293.62	6.38	30.96	I	C	SP P
BKS	64.882	60.89	6.37	30.90	I	C	SP P
GCC	65.571	61.47	6.32	30.60	I	C	SP P
JAS	65.921	59.82	6.29	30.45	E	C	LP P
JAS1	65.945	59.83	6.29	30.44	I	C	SP P
CTAO	65.965	179.91	6.29	30.43	E	D	LP P
CTA	65.965	179.91	6.29	30.43	I	D	SP P
LLA	66.482	61.21	6.25	30.21	I	C	SP P
WR2	66.692	192.10	6.23	30.12	I	D	SP P
ISQ	66.859	186.74	6.21	30.05	I	D	SP P
MNA	66.961	58.14	6.21	30.01	I	C	SP P
PRI	66.962	61.44	6.21	30.01	I	C	SP P
FRI	66.984	60.19	6.20	30.00	I	C	SP P
FRB	67.024	15.97	6.20	29.98	I	C	SP P
HFS	67.170	336.39	6.19	29.92	I	C	SP P
AKU	67.793	353.04	6.14	29.65	I	C	SP P
KOD	67.960	261.65	6.13	29.58	I	C	SP P
HYA	68.206	340.38	6.11	29.48	I	C	LP P
KONO	68.685	337.99	6.07	29.29	I	C	LP P
BER	69.095	340.38	6.05	29.16	I	C	LP P
KMY	70.156	339.83	5.97	28.76	I	C	LP P
DZM	70.385	160.05	5.95	28.66	I	D	SP P
ASPA	70.413	191.94	5.95	28.65	I	D	SP P
NOU	70.617	160.11	5.94	28.57	I	D	SP P
MBL	71.160	205.95	5.90	28.38	I	D	SP P
COP	71.285	334.40	5.89	28.33	I	C	SP P
MUD	71.560	336.48	5.87	28.22	I	C	SP P
RMQ	72.374	177.57	5.81	27.92	I	D	SP P
KRA	73.423	327.14	5.74	27.54	I	C	SP P
BRL	73.747	332.16	5.72	27.43	I	C	SP P
BRN	73.820	332.18	5.71	27.41	I	C	SP P
VRI	73.978	320.72	5.70	27.36	I	C	SP P

Table 86. Station data for event 206 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
SPC	74.011	326.45	5.70	27.35	I	C	SP P
LHC	74.103	34.79	5.70	27.32	I	C	SP P
BRD	74.108	320.31	5.70	27.32	I	C	SP P
KSP	74.103	329.61	5.70	27.32	I	C	SP P
WBN	74.154	198.26	5.69	27.31	I	D	-SP P
TLB	74.385	319.13	5.68	27.23	I	C	SP P
MLR	74.616	320.92	5.66	27.15	I	C	SP P
ISR	74.627	320.35	5.66	27.14	I	C	SP P
MSR	74.672	321.91	5.66	27.12	I	C	SP P
CLL	74.830	331.68	5.64	27.05	I	C	SP P
BRG	74.886	330.92	5.64	27.03	I	C	SP P
PSN	75.016	318.45	5.63	26.98	I	C	SP P
PRU	75.431	330.10	5.61	26.85	I	C	SP P
WIT	75.462	335.97	5.60	26.85	I	C	SP P
ANTO	75.691	313.19	5.59	26.77	E	C	LP P
MOX	75.852	332.10	5.58	26.72	I	C	SP P
MOX	75.852	332.10	5.58	26.72	I	C	LP P
SRO	75.876	326.71	5.58	26.72	I	C	SP P
ZST	76.015	327.63	5.57	26.67	I	C	SP P
HOF	76.053	331.78	5.57	26.66	I	C	SP P
GZR	76.054	322.68	5.57	26.66	I	C	SP P
ALQ	76.129	53.87	5.56	26.64	I	C	SP P
ANMO	76.127	53.86	5.57	26.64	E	C	LP P
WTS	76.147	335.49	5.56	26.63	I	C	SP P
VKA	76.247	328.12	5.56	26.60	I	C	SP P
KHC	76.492	330.17	5.54	26.53	I	C	SP P
DBN	76.514	336.47	5.54	26.53	I	C	LP P
SOP	76.644	327.65	5.54	26.49	I	C	SP P
JMB	76.698	318.61	5.53	26.47	I	D	SP P
WET	76.719	330.58	5.53	26.46	I	C	SP P
PVL	76.803	319.88	5.53	26.44	I	C	SP P
GRF	76.804	331.83	5.53	26.44	I	C	SP P
BNS	76.954	334.79	5.52	26.39	I	C	SP P
JCK	77.108	335.25	5.51	26.34	I	C	SP P
KMR	77.212	329.27	5.50	26.31	I	C	LP P
TNS	77.222	333.70	5.50	26.30	I	C	SP P
CMS	77.316	180.30	5.49	26.27	I	D	SP P
GSH	77.389	335.14	5.49	26.25	I	C	SP P
DIM	77.486	318.94	5.48	26.21	I	C	SP P
ENN	77.495	335.42	5.48	26.21	I	C	SP P
MEM	77.611	335.30	5.47	26.17	I	C	SP P
STK	77.819	183.98	5.46	26.09	I	D	SP P
PLD	77.839	319.51	5.46	26.08	I	C	SP P
UCC	77.911	336.34	5.45	26.05	I	C	LP P
UCC	77.911	336.34	5.45	26.05	I	C	SP P
KDZ	77.913	318.83	5.45	26.05	I	C	SP P
BHG	77.938	329.83	5.45	26.04	I	C	SP P
FUR	78.106	331.01	5.44	25.97	I	C	SP P
VTS	78.113	320.72	5.43	25.97	I	C	SP P
SNF	78.189	336.26	5.43	25.94	I	C	SP P

Table 86. Station data for event 206 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
STU	78.262	332.54	5.42	25.91	I	C	SP	P
KBA	78.324	329.21	5.42	25.88	I	C	SP	P
WLF	78.411	334.77	5.41	25.84	I	C	SP	P
DOU	78.476	335.89	5.40	25.81	I	C	SP	P
DOU	78.476	335.89	5.40	25.81	I	C	LP	P
BCK	78.641	312.94	5.39	25.74	I	D	SP	P
MMB	78.689	319.79	5.38	25.71	I	C	SP	P
ETA	78.688	343.28	5.38	25.71	I	C	SP	P
GAP	78.774	330.78	5.38	25.67	I	C	SP	P
LJU	78.775	327.94	5.38	25.67	I	C	SP	P
VOY	79.020	328.32	5.35	25.54	I	C	SP	P
ECB	79.114	343.50	5.34	25.50	I	C	SP	P
CDF	79.183	333.51	5.34	25.46	I	C	SP	P
ECP	79.208	343.20	5.33	25.45	I	C	SP	P
OGA	79.315	330.49	5.32	25.39	I	C	SP	P
TRI	79.342	328.23	5.32	25.38	I	C	SP	P
SKO	79.389	321.42	5.31	25.35	I	C	SP	P
VAY	79.421	320.34	5.31	25.34	I	C	SP	P
ELL	79.536	312.90	5.30	25.28	I	C	SP	P
SAX	79.545	331.70	5.30	25.27	I	C	SP	P
IZM	79.568	315.62	5.30	25.26	I	C	SP	P
ZUL	79.653	332.39	5.29	25.22	I	C	SP	P
OSS	79.772	330.94	5.28	25.15	I	C	SP	P
HAU	79.830	333.88	5.27	25.12	I	C	SP	P
BSF	79.848	333.53	5.27	25.11	I	C	SP	P
MRWA	79.885	206.51	5.26	25.10	I	D	SP	P
TTG	79.941	323.04	5.26	25.07	I	C	SP	P
LLS	79.995	331.73	5.25	25.04	I	C	SP	P
YOU	80.124	178.14	5.24	24.99	I	D	SP	P
VDL	80.173	331.25	5.24	24.97	I	C	SP	P
JER	80.496	306.25	5.21	24.84	I	C	SP	P
OCO	80.529	47.82	5.21	24.83	I	C	SP	P
TMA	80.706	331.43	5.20	24.76	I	C	SP	P
MMK	81.053	331.97	5.17	24.62	I	C	SP	P
FLN	81.062	338.39	5.17	24.61	I	C	SP	P
ADE	81.066	186.20	5.17	24.61	I	D	SP	P
TUL	81.085	46.50	5.17	24.61	I	C	SP	P
LDF	81.125	338.10	5.17	24.59	I	C	SP	P
CAN	81.179	177.66	5.16	24.58	I	D	SP	P
DIX	81.207	332.33	5.16	24.57	I	C	SP	P
LOR	81.236	335.08	5.16	24.56	I	C	SP	P
RLO	81.268	45.84	5.16	24.55	I	C	SP	P
EMS	81.370	332.63	5.15	24.52	I	C	SP	P
LBF	81.458	334.89	5.15	24.50	I	C	SP	P
GRR	81.504	338.48	5.14	24.48	I	C	SP	P
SSF	81.526	335.21	5.14	24.47	I	C	SP	P
OTT	81.603	28.40	5.14	24.45	I	C	SP	P
SMF	81.805	334.82	5.12	24.39	I	C	SP	P
AVF	81.817	335.19	5.12	24.38	I	C	SP	P
LPF	81.880	338.46	5.12	24.36	I	C	SP	P

Table 86. Station data for event 206 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
LPG	81.937	332.47	5.12	24.34	I	C	SP P
WAM	82.045	177.78	5.11	24.31	I	D	SP P
BGF	82.175	335.41	5.10	24.27	I	C	SP P
MNT	82.183	27.03	5.10	24.27	I	C	SP P
MZF	82.562	335.44	5.08	24.15	I	C	SP P
TCF	82.603	335.70	5.08	24.14	I	C	SP P
RSNY	82.742	28.04	5.07	24.10	E	C	LP P
BHO	82.754	46.84	5.07	24.10	J	C	SP P
LSF	82.831	336.12	5.06	24.07	I	C	SP P
MFF	82.967	337.34	5.05	24.03	I	C	SP P
NWAO	82.985	204.21	5.05	24.03	E	D	LP P
JCT	83.174	52.58	5.04	23.97	I	C	SP P
RJF	83.699	335.75	5.01	23.82	I	C	SP P
FRF	83.695	331.65	5.01	23.82	I	C	SP P
CVF	83.819	329.74	5.00	23.78	I	C	SP P
LRG	83.884	331.79	5.00	23.76	I	C	SP P
CAF	83.887	335.23	5.00	23.76	I	C	SP P
CDR	83.881	332.28	5.00	23.76	I	C	SP P
LMR	83.943	331.64	5.00	23.74	I	C	SP P
HLW	84.093	307.57	4.99	23.69	I	C	SP P
LFF	84.253	336.11	4.98	23.65	I	C	SP P
LPO	84.362	335.71	4.97	23.61	I	C	SP P
MLS	85.973	335.09	4.84	22.93	I	C	SP P
EPF	86.121	335.62	4.83	22.88	I	C	SP P
LGR	87.440	337.35	4.76	22.53	I	D	SP P
TOL	90.260	337.53	4.70	22.24	I	C	SP P
CRT	92.657	336.26	4.63	21.88	I	C	SP P
IFR	96.528	336.18	4.52	21.35	I	C	SP P
MTD	118.897	275.73	1.87	8.69	I	C	SP PKP
KRI	120.290	277.20	1.87	8.68	I	C	SP PKP
KIC	121.611	325.43	1.87	8.67	I	C	SP PKP
SLR	127.134	270.26	1.86	8.62	I	C	SP PKP
BPI	127.588	270.02	1.86	8.61	I	D	SP PKP
BFS	128.907	270.20	1.85	8.59	I	D	SP PKP
SOB1	142.648	11.55	1.72	7.98	I	C	SP PKP
TPZ	144.199	57.26	1.69	7.85	I	C	SP PKP
BDF	147.357	25.74	1.62	7.52	I	C	SP PKP
PEL	149.063	78.21	1.58	7.31	I	C	SP PKP

Figure 34. Azimuthal equidistant map for geographic subdivision, Japan

FIRST MOTION FM LOCATIONS 1984–1985 JAPAN

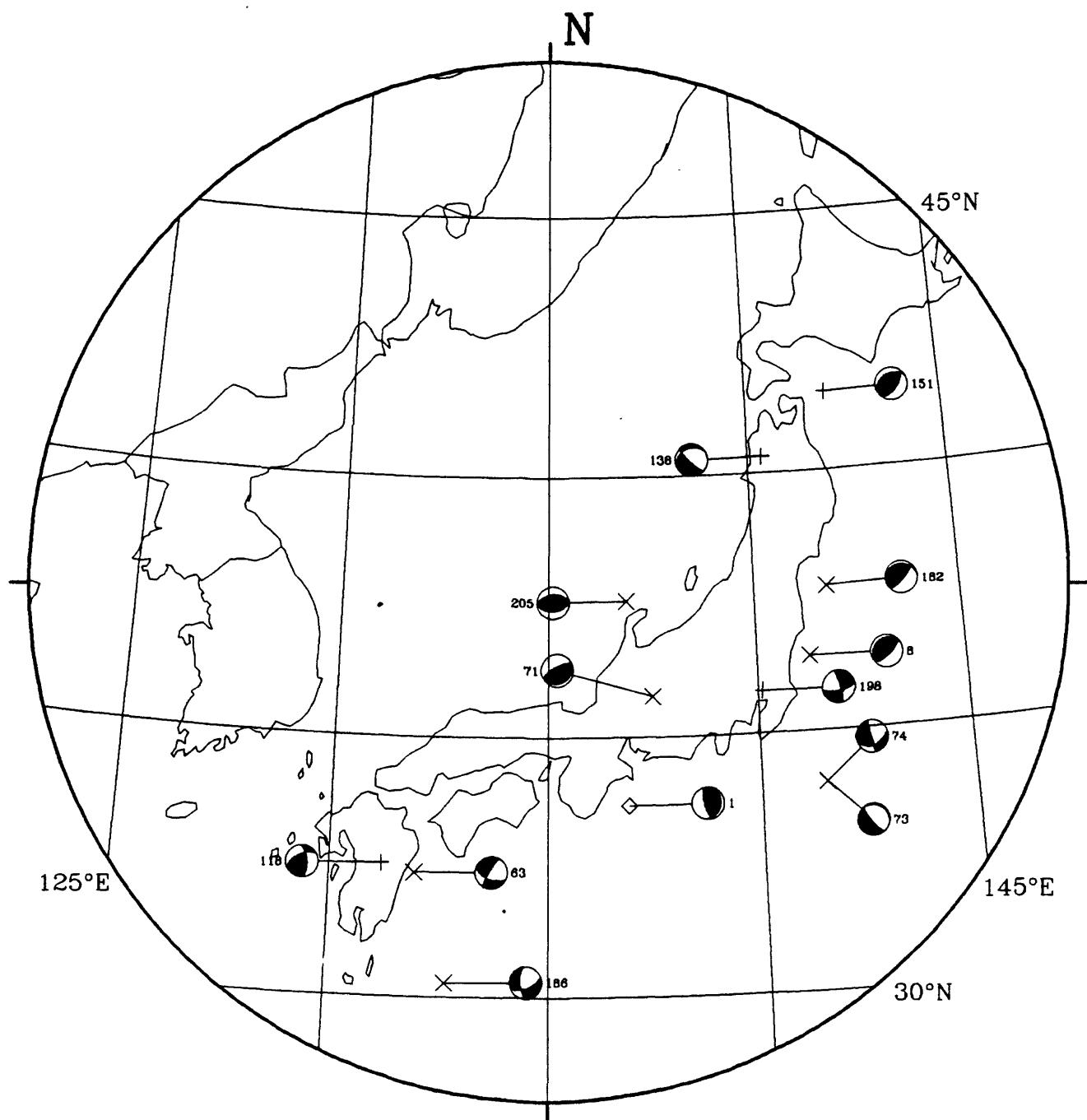
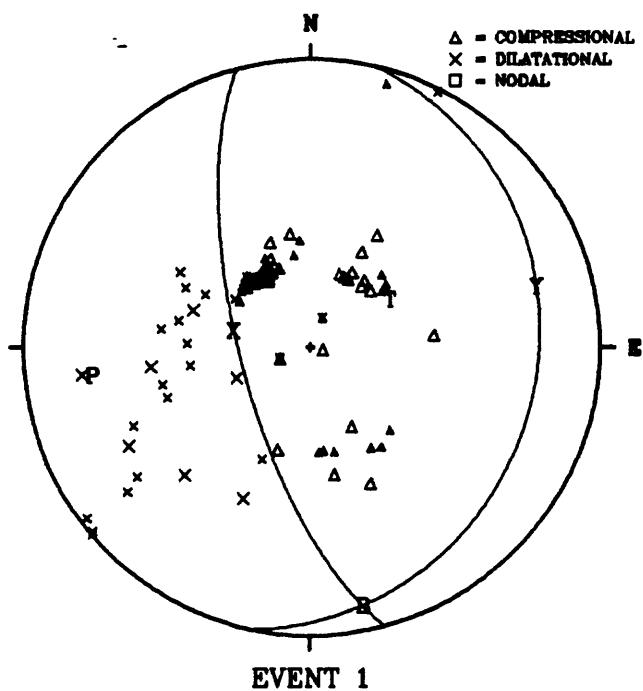


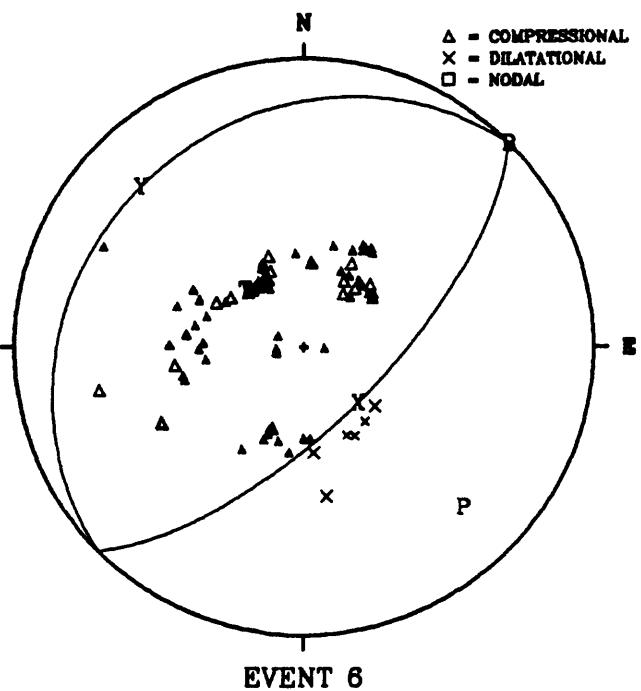
Table 87. Focal mechanism parameters for subdivision,
Japan

EVENT #	NODAL PLANE 1 (DEG)			NODAL PLANE 2 (DEG)			T AXIS (DEG)		P AXIS (DEG)		B AXIS (DEG)	
	ϑ	δ	λ	ϑ	δ	λ	PLG	AZM	PLG	AZM	PLG	AZM
1	165	70	80	12	22	116	64	59	24	263	9	168
6	45	68	90	225	22	90	67	315	23	135	0	45
63	210	80	-142	112	53	-13	18	336	33	78	51	223
71	62	20	90	242	70	90	65	152	25	332	0	62
73	138	78	-85	295	13	-112	33	224	57	54	5	317
74	163	87	-130	69	40	-5	30	285	35	39	40	166
118	244	52	145	357	63	44	49	216	7	118	40	23
138	133	81	-65	242	26	-159	31	202	48	70	25	309
151	33	58	75	240	35	112	73	265	12	134	13	41
166	175	62	-147	68	61	-32	0	301	42	32	48	211
182	40	75	77	262	20	130	58	293	29	140	13	43
198	343	85	-25	75	65	-174	14	32	21	296	65	152
205	265	45	90	85	45	90	90	0	0	175	0	85

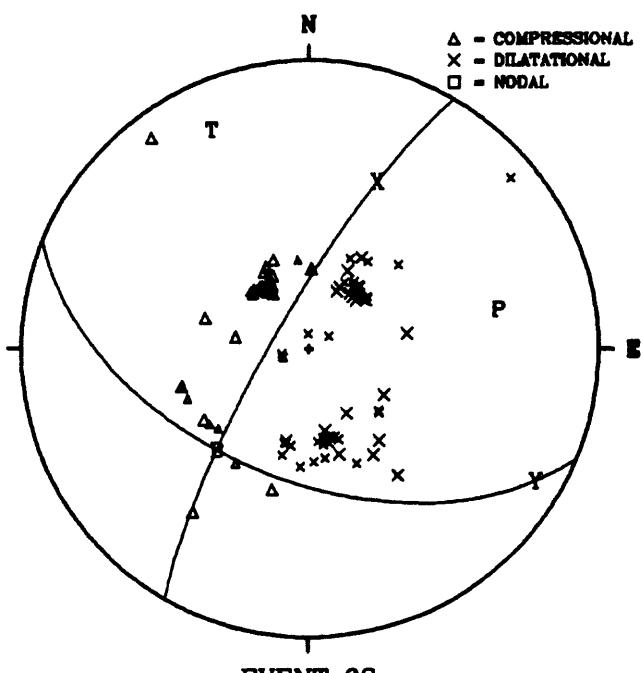
Figure 35. Lower hemisphere focal sphere projection for events 1, 6, 63, and 71.



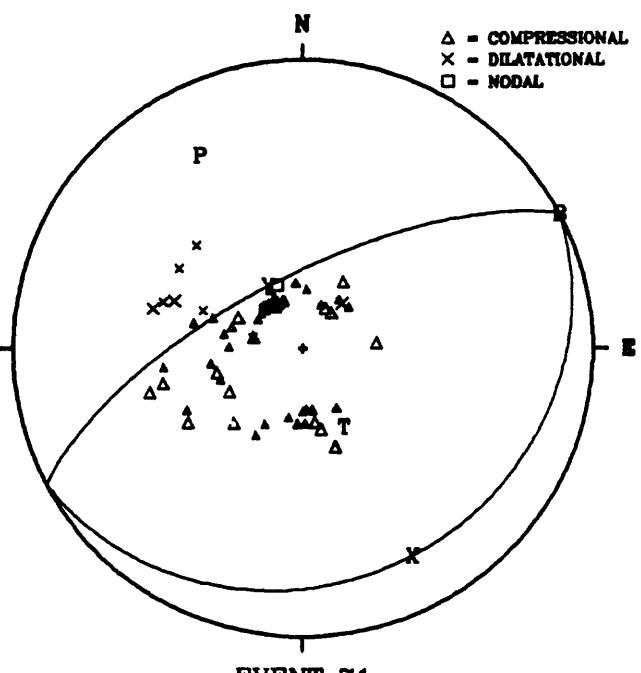
EVENT 1



EVENT 6

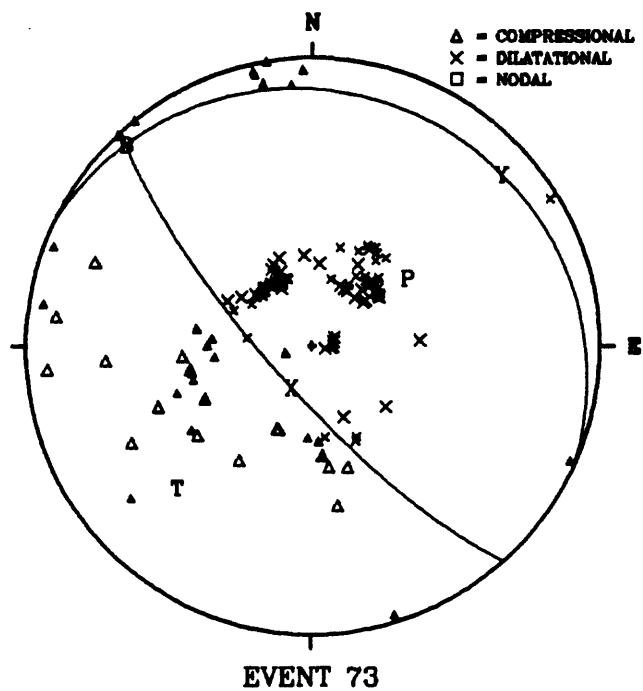


EVENT 63

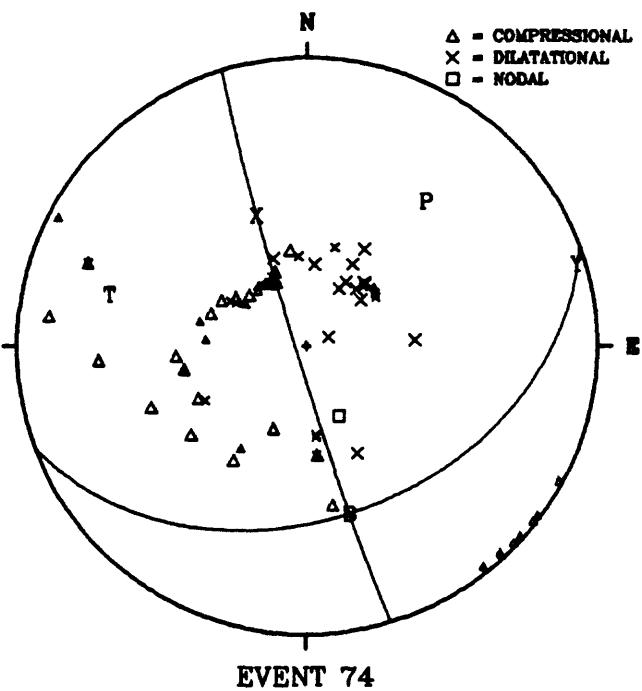


EVENT 71

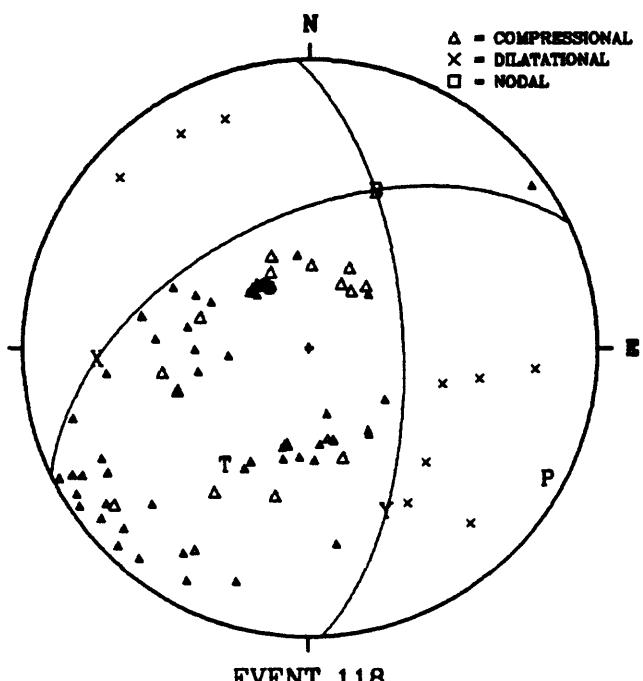
Figure 36. Lower hemisphere focal sphere projection for events 73, 74, 118, and 138.



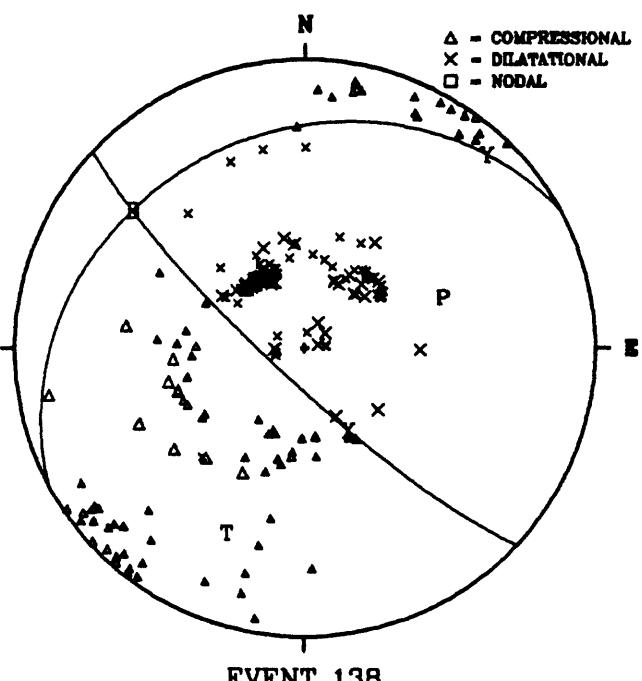
EVENT 73



EVENT 74



EVENT 118



EVENT 138

Figure 37. Lower hemisphere focal sphere projection for events 151, 166, 182, and 198.

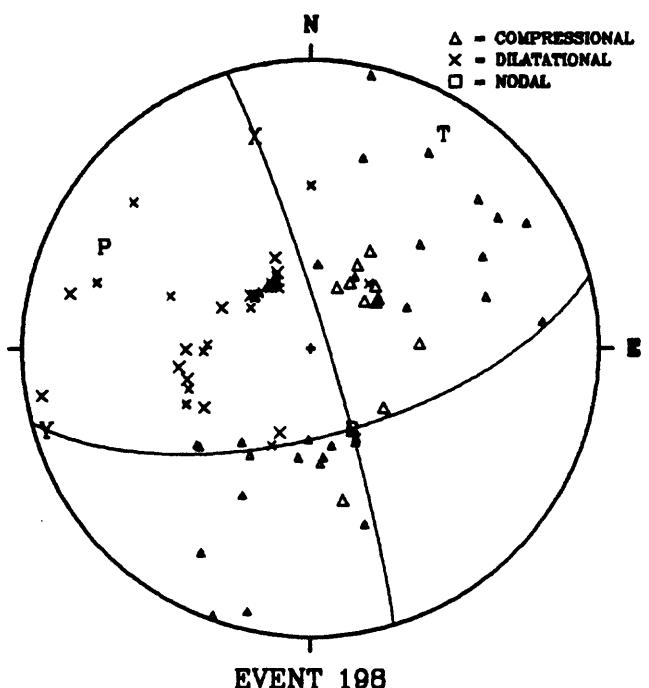
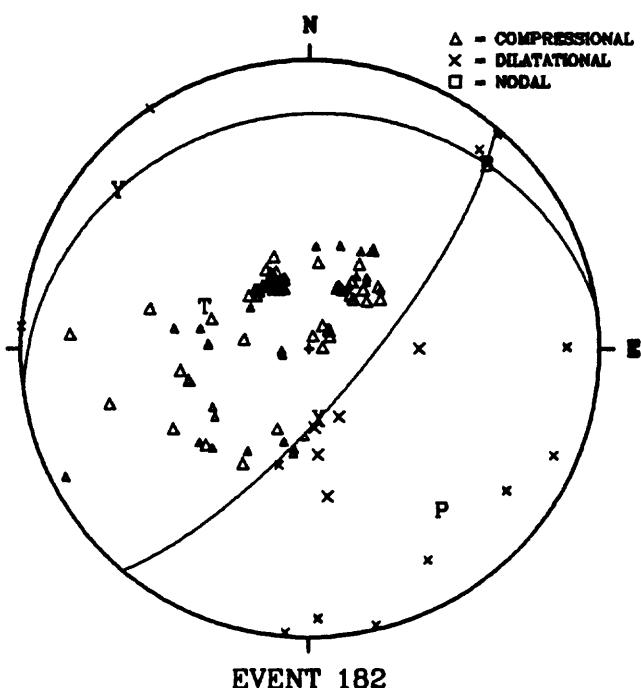
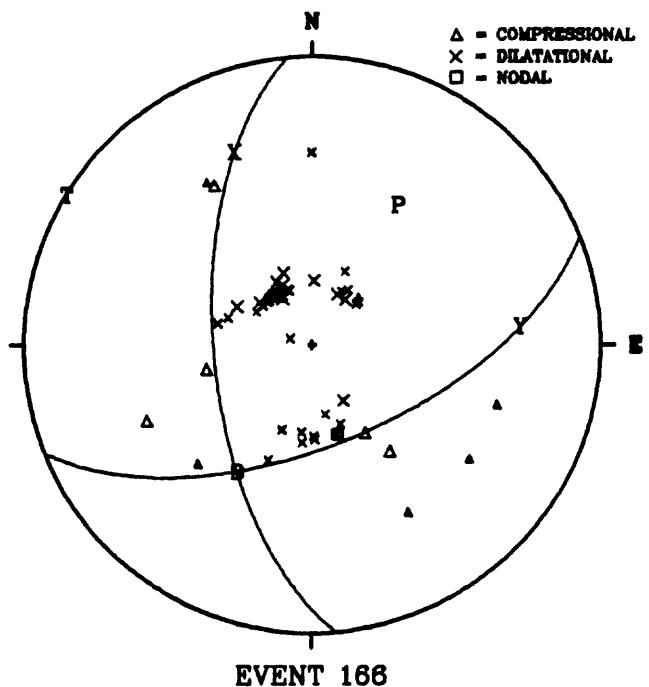
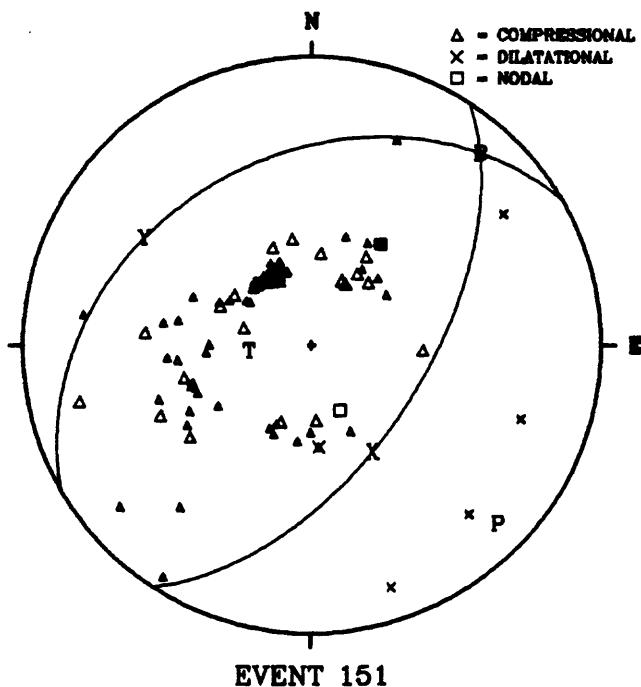


Figure 38. Lower hemisphere focal sphere projection for event 205.

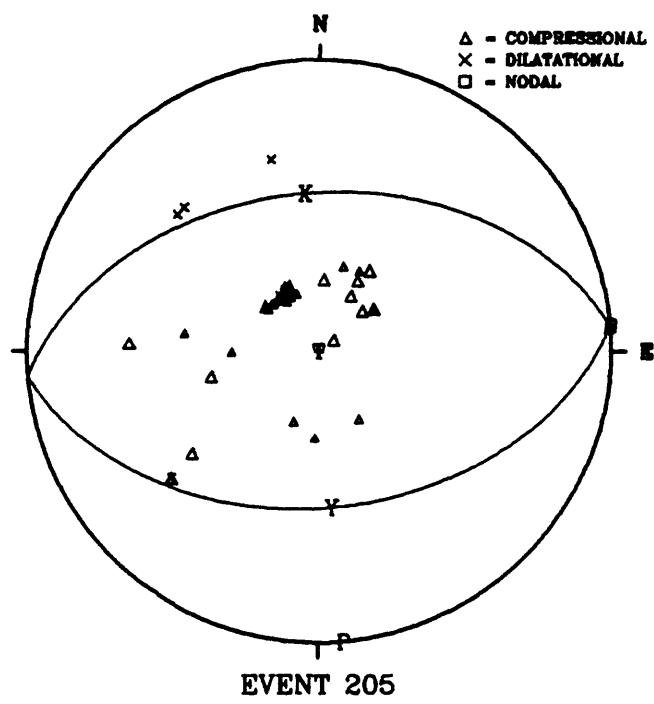


Table 88. Station data for event 1.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
NGO	10.461	229.88	11.88	88.87	I	D	SP	P
OBI	10.472	26.45	11.88	88.87	I	D	SP	P
NAH	10.911	229.43	11.89	90.00	I	D	SP	P
KMJ	11.398	232.69	11.87	87.28	I	D	SP	P
WAK	12.281	16.02	11.83	84.30	I	C	SP	P
MYK	13.459	231.82	11.16	69.89	I	D	SP	P
SSE	13.524	263.29	11.10	68.99	I	D	LP	P
ISI	14.506	233.36	10.71	64.33	I	D	SP	P
ANP	15.836	241.70	10.42	61.20	I	D	LP	P
QZH	18.163	246.15	9.96	56.93	I	D	SP	P
BAG	22.621	224.50	9.39	52.15	I	D	LP	P
DAV	28.461	204.13	8.80	47.74	I	D	LP	P
KMI	30.844	263.05	8.64	46.64	I	D	LP	P
CHG	36.892	256.02	8.29	44.22	I	D	SP	P
NST	37.656	250.68	8.25	43.98	I	D	SP	P
LSA	38.887	276.94	8.19	43.54	I	D	SP	P
WMQ	39.174	299.83	8.17	43.44	I	D	SP	P
RAB	40.339	156.05	8.11	43.04	I	C	LP	P
KSH	48.458	295.31	7.60	39.73	I	D	SP	P
NDI	50.696	281.42	7.43	38.67	I	D	SP	P
COL	53.886	30.72	7.18	37.16	I	C	LP	P
CTAO	54.202	169.14	7.16	37.03	I	C	LP	P
POO	57.792	271.76	6.90	35.48	I	D	SP	P
HON	58.205	84.28	6.87	35.28	I	C	LP	P
QUE	58.417	287.29	6.85	35.18	I	D	LP	P
KOD	59.010	261.33	6.80	34.92	I	D	SP	P
PVC	59.264	144.69	6.78	34.80	I	C	SP	P
NAU	59.506	203.04	6.76	34.68	I	D	SP	P
MHI	61.819	296.56	6.59	33.66	I	D	SP	P
NOU	62.391	148.97	6.54	33.39	I	C	SP	P
KBS	63.318	349.78	6.47	32.97	I	C	LP	P
NDF	64.121	136.47	6.40	32.60	I	C	SP	P
KEV	65.250	338.87	6.31	32.06	I	C	LP	P
RIV	68.472	167.26	6.05	30.62	I	C	SP	P
RSNT	68.546	28.25	6.05	30.59	I	C	LP	P
DAG	68.772	354.15	6.04	30.53	I	C	SP	P
NWAO	68.783	197.67	6.04	30.52	E	C	LP	P
BFD	70.683	175.22	5.90	29.76	I	C	SP	P
TOO	71.332	172.80	5.86	29.51	I	C	SP	P
LON	73.238	44.77	5.73	28.81	I	C	SP	P
UPP	74.293	332.78	5.65	28.41	I	C	SP	P
WDC	76.046	50.49	5.55	27.83	I	C	SP	P
KONO	77.360	335.54	5.46	27.36	I	C	LP	P
CLI	78.099	318.36	5.40	27.04	I	C	SP	P
PPE	78.112	317.94	5.40	27.04	I	D	SP	P
CFR	78.421	316.87	5.38	26.93	I	C	SP	P
TLB	78.844	316.43	5.33	26.65	I	C	SP	P
JAS	78.851	51.83	5.33	26.64	I	C	SP	P
JAS	78.851	51.83	5.33	26.64	I	C	LP	P
AKU	79.079	349.73	5.31	26.51	I	C	SP	P

Table 88. Station data for event 1 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
CVO	79.153	318.24	5.30	26.48	I	C	SP P
COP	79.187	331.61	5.30	26.46	E	C	LP P
PSN	79.295	315.62	5.29	26.43	I	C	SP P
ISR	79.361	317.52	5.29	26.40	I	C	SP P
MLR	79.483	318.07	5.27	26.34	I	C	SP P
MUD	79.874	333.51	5.23	26.13	I	D	SP P
MDB	79.942	319.28	5.23	26.09	I	D	SP P
GPA	80.015	311.89	5.22	26.06	I	C	SP P
BUC1	80.134	317.11	5.21	26.00	I	C	SP P
CGN	80.261	316.98	5.20	25.94	I	C	SP P
IST	80.377	313.11	5.19	25.90	J	C	LP P
COZ	80.476	318.64	5.18	25.86	I	C	SP P
DMK	80.660	314.30	5.17	25.79	I	D	SP P
DEV	80.905	319.73	5.16	25.72	I	D	SP P
JMB	80.964	315.36	5.16	25.70	I	D	SP P
PVL	81.363	316.55	5.13	25.57	I	C	SP P
DST	81.461	312.11	5.12	25.54	I	C	SP P
JER	81.653	302.54	5.11	25.47	I	D	SP P
HAM	81.806	331.14	5.10	25.42	I	D	SP P
BRG	81.974	327.52	5.09	25.37	I	C	LP P
SRO	82.023	323.29	5.09	25.36	I	C	SP P
CLL	82.081	328.26	5.09	25.34	I	C	SP P
PLD	82.283	315.94	5.07	25.27	I	C	SP P
PRU	82.330	326.61	5.07	25.26	I	C	SP P
SNZO	82.334	152.22	5.07	25.26	I	C	LP P
ELL	82.352	309.19	5.07	25.25	I	C	SP P
ZST	82.360	324.13	5.07	25.25	I	C	SP P
VKA	82.694	324.55	5.05	25.14	I	C	SP P
IZM	83.037	311.79	5.03	25.04	I	C	SP P
MOX	83.168	328.43	5.02	25.00	I	C	SP P
MMB	83.174	316.00	5.02	24.99	I	C	SP P
HOF	83.296	328.08	5.02	24.95	I	C	SP P
WIT	83.587	332.20	5.00	24.86	I	C	SP P
WET	83.691	326.79	4.99	24.83	I	C	SP P
KMR	83.886	325.43	4.98	24.77	I	C	LP P
GRF	84.039	327.96	4.97	24.72	I	C	SP P
GRFO	84.042	327.96	4.97	24.71	I	C	LP P
WTS	84.160	331.60	4.96	24.67	I	C	SP P
SKO	84.236	317.41	4.96	24.64	I	C	SP P
DBN	84.717	332.46	4.91	24.42	I	C	LP P
BHG	84.716	325.80	4.91	24.42	I	C	SP P
RSON	84.757	29.46	4.91	24.38	I	C	LP P
RSSD	84.776	39.21	4.90	24.37	I	C	LP P
BNS	84.805	330.76	4.90	24.35	I	C	SP P
TNS	84.841	329.66	4.90	24.33	I	C	SP P
ESK	85.002	338.40	4.88	24.25	I	C	SP P
LJU	85.119	323.80	4.87	24.20	I	C	SP P
FUR	85.134	326.89	4.87	24.19	I	C	SP P
RBL	85.306	324.56	4.86	24.12	I	C	SP P
CEY	85.387	323.64	4.85	24.09	I	C	SP P

Table 88. Station data for event 1 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ENN	85.463	331.25	4.85	24.06	I	C	SP	P
HLW	85.461	302.91	4.85	24.06	I	C	SP	P
ATH	85.483	313.21	4.84	24.05	I	C	SP	P
TRI	85.735	323.95	4.83	23.96	I	C	SP	P
SCE	85.758	325.90	4.83	23.96	I	C	SP	P
UCC	86.058	332.04	4.81	23.86	E	C	LP	P
BUH	86.107	328.75	4.81	23.84	I	C	SP	P
GWF	86.138	329.25	4.80	23.83	I	C	SP	P
OGA	86.203	326.13	4.80	23.81	I	C	SP	P
WLF	86.225	330.43	4.80	23.81	E	C	LP	P
CTI	86.511	325.26	4.78	23.72	I	C	SP	P
SAX	86.688	327.24	4.77	23.67	E	C	LP	P
SLE	86.680	328.02	4.77	23.68	E	C	LP	P
OSS	86.745	326.46	4.77	23.66	E	C	LP	P
ZUL	86.941	327.88	4.76	23.63	E	C	LP	P
LLS	87.132	327.17	4.76	23.59	E	C	LP	P
VDL	87.204	326.67	4.75	23.57	E	C	LP	P
BSF	87.371	328.94	4.75	23.53	I	C	SP	P
HAU	87.428	329.28	4.74	23.52	I	C	SP	P
DLE	87.754	339.02	4.73	23.44	I	C	SP	P
TMA	87.763	326.73	4.73	23.44	E	C	LP	P
ALP	87.924	322.00	4.72	23.41	I	C	SP	P
MMK	88.217	327.17	4.71	23.37	E	C	LP	P
DUI	88.262	320.75	4.71	23.37	I	C	SP	P
ORI	88.318	318.54	4.71	23.36	I	C	SP	P
AQU	88.319	321.79	4.71	23.36	I	C	SP	P
POI	88.397	322.19	4.71	23.35	I	C	SP	P
DIX	88.444	327.49	4.71	23.35	E	C	LP	P
SGO	88.587	319.51	4.71	23.33	I	C	SP	P
EMS	88.667	327.74	4.71	23.33	E	C	LP	P
MNS	88.666	322.20	4.71	23.33	I	C	SP	P
LOR	89.052	330.14	4.70	23.30	I	C	SP	P
RMP	89.071	321.79	4.70	23.30	I	C	SP	P
RDP	89.102	321.75	4.70	23.29	I	C	SP	P
LBF	89.228	329.90	4.70	23.29	I	C	SP	P
GRC	89.354	330.58	4.70	23.30	I	C	SP	P
SSF	89.363	330.20	4.70	23.30	I	C	SP	P
SMF	89.554	329.77	4.70	23.29	I	C	SP	P
FLN	89.555	333.38	4.70	23.29	I	C	SP	P
LDF	89.559	333.08	4.70	23.29	I	C	SP	P
ANMO	89.575	47.25	4.70	23.28	I	C	LP	P
AVF	89.642	330.12	4.70	23.28	I	C	SP	P
GRR	90.005	333.37	4.69	23.24	I	C	SP	P
LPF	90.369	333.27	4.68	23.20	I	C	SP	P
MZF	90.421	330.20	4.68	23.19	I	C	SP	P
CVF	90.432	324.41	4.68	23.19	I	C	SP	P
TCF	90.517	330.45	4.68	23.18	I	C	SP	P
FRF	90.728	326.29	4.68	23.16	I	C	SP	P
LSF	90.826	330.81	4.68	23.16	I	C	SP	P
LRG	90.942	326.39	4.67	23.15	I	C	SP	P

Table 88. Station data for event 1 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
LMR	90.967	326.23	4.67	23.14	I	C	SP	P
MFF	91.208	331.96	4.66	23.10	I	C	SP	P
RJF	91.598	330.27	4.65	23.02	I	C	SP	P
CAF	91.676	329.73	4.65	23.01	I	C	SP	P
LFF	92.215	330.50	4.63	22.94	I	C	SP	P
LPO	92.239	330.09	4.63	22.94	I	C	SP	P
EPF	93.940	329.64	4.57	22.63	I	C	SP	P
PCR	94.639	247.75	4.56	22.54	E	D	LP	P
TUL	95.055	40.41	4.54	22.44	I	C	LP	P
RSNY	97.065	22.07	4.50	22.24	I	C	LP	P
ALI	98.130	327.47	4.48	22.12	E	C	LP	P
SCP	99.264	26.01	4.44	21.95	I	C	LP	P
MAL	101.205	329.20	4.44	21.93	I	D	SP	Pdf
BLA	101.372	29.58	4.44	21.93	E	C	LP	Pdf
GRM	122.969	249.39	1.87	9.05	I	C	LP	PKP
GRM	122.969	249.39	1.87	9.05	I	D	SP	PKP
BPA	126.484	22.49	1.86	9.01	I	D	SP	PKP
SUR	127.183	252.54	1.86	9.00	I	D	SP	PKP
FDF	128.878	22.64	1.85	8.97	I	C	SP	PKP
LPA	167.676	99.83	0.75	3.61	I	C	LP	PKP

Table 89. Station data for event 6.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SNY	14.741	296.79	13.01	66.29	I	C	SP	P
SSE	17.520	258.11	12.45	61.18	E	C	LP	P
ANP	20.298	241.97	10.28	46.34	E	C	LP	P
TATO	20.447	241.55	10.28	46.34	I	C	LP	P
GUMO	22.980	171.01	9.75	43.33	I	D	LP	P
CD2	31.565	270.98	8.78	38.16	I	C	SP	P
GTA	32.634	287.99	8.71	37.80	I	C	SP	P
KMI	34.762	262.05	8.55	36.99	I	C	LP	P
WMQ	41.010	297.42	8.21	35.29	I	C	SP	P
CHG	41.036	256.29	8.21	35.29	I	C	SP	P
BDT	41.884	254.30	8.15	35.00	I	C	SP	P
TTA	45.980	34.44	7.93	33.92	I	C	SP	P
MKS	46.187	210.83	7.93	33.92	I	C	SP	P
IMA	47.263	30.24	7.84	33.49	I	C	SP	P
PKI	47.624	275.95	7.84	33.49	I	C	SP	P
KKN	47.635	276.29	7.84	33.49	I	C	SP	P
DMN	47.851	276.16	7.81	33.34	I	C	SP	P
PMR	49.176	36.33	7.73	32.96	I	C	SP	P
COL	49.672	31.93	7.69	32.76	I	C	SP	P
COL	49.672	31.93	7.69	32.76	I	C	LP	P
KSH	50.562	294.39	7.61	32.38	I	C	SP	P
NDI	53.676	281.29	7.37	31.24	I	C	SP	P
INK	54.974	26.90	7.25	30.68	I	C	SP	P
CTAO	56.409	174.37	7.14	30.16	E	D	LP	P
WB2	56.448	187.81	7.14	30.16	I	C	SP	P
MBC	57.133	16.33	7.10	29.98	I	C	SP	P
HYB	58.074	268.72	7.03	29.65	I	C	SP	P
PVC	59.635	149.85	6.92	29.14	I	D	SP	P
MBL	60.758	203.01	6.80	28.59	I	C	SP	P
QUE	61.018	287.64	6.80	28.59	I	C	SP	P
POO	61.276	272.57	6.76	28.41	I	C	SP	P
KOD	62.949	262.60	6.63	27.81	I	C	SP	P
NOU	63.083	153.77	6.63	27.81	I	D	SP	P
WBN	63.758	194.72	6.55	27.45	I	C	SP	P
MHI	63.787	296.97	6.55	27.45	I	C	LP	P
KEV	63.963	339.31	6.55	27.45	I	C	LP	P
RSNT	64.399	29.97	6.51	27.27	E	C	LP	P
VUN	64.553	140.42	6.51	27.27	I	D	SP	P
MEK	66.263	202.20	6.35	26.54	I	C	SP	P
DAG	66.372	355.08	6.35	26.54	I	C	SP	P
AFI	66.839	129.48	6.30	26.32	E	D	LP	P
KJF	67.007	334.16	6.30	26.32	I	C	SP	P
CMS	67.696	175.79	6.26	26.14	I	C	SP	P
STK	67.955	179.70	6.22	25.96	I	C	SP	P
LON	68.748	47.10	6.18	25.78	E	C	LP	P
IR7	70.370	300.22	6.03	25.11	I	C	SP	P
NUR	70.426	331.99	6.03	25.11	I	C	SP	P
BAL	70.556	202.34	6.03	25.11	I	C	SP	P
WDC	71.526	52.98	5.95	24.75	I	C	SP	P
TAB	72.050	304.24	5.92	24.62	I	C	LP	P

Table 89. Station data for event 6 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
NWAO	72.566	201.04	5.88	24.44	I	C	SP	P
NWAO	72.566	201.04	5.88	24.44	E	C	LP	P
SES	72.695	39.70	5.88	24.44	I	C	SP	P
UPP	73.444	334.00	5.81	24.13	I	C	SP	P
GDH	74.064	5.43	5.78	24.00	E	C	LP	P
GDH	74.064	5.43	5.78	24.00	I	C	SP	P
FFC	74.275	32.56	5.74	23.83	I	C	SP	P
JAS	74.330	54.35	5.74	23.83	E	C	LP	P
JAS	74.330	54.35	5.74	23.83	I	C	SP	P
FCC	74.592	26.41	5.74	23.83	I	C	SP	P
LRM	74.660	44.12	5.74	23.83	I	C	SP	P
BMN	74.982	50.76	5.71	23.69	I	C	SP	P
KONO	76.287	337.01	5.61	23.25	E	C	LP	P
KRA	79.529	325.95	5.41	22.38	I	C	SP	P
PSN	79.776	317.29	5.35	22.12	I	C	SP	P
RSSD	80.357	41.59	5.30	21.90	E	C	LP	P
JOS	80.366	324.55	5.30	21.90	I	C	SP	P
KSP	80.553	328.22	5.30	21.90	I	C	SP	P
RSON	80.564	31.75	5.30	21.90	E	C	LP	P
IST	81.051	314.88	5.26	21.73	E	C	LP	P
BRG	81.511	329.37	5.21	21.51	I	C	SP	P
CLL	81.560	330.11	5.21	21.51	I	C	SP	P
PVL	81.765	318.38	5.17	21.34	I	C	SP	P
BUD	81.802	324.57	5.17	21.34	I	C	SP	P
PRU	81.936	328.50	5.17	21.34	I	C	SP	P
ZST	82.162	326.02	5.17	21.34	I	C	SP	P
VKA	82.462	326.46	5.14	21.21	I	C	SP	P
MOX	82.630	330.38	5.14	21.21	I	C	SP	P
KDZ	82.695	317.18	5.14	21.21	I	D	SP	P
HOF	82.784	330.03	5.11	21.08	I	C	SP	P
KHC	82.996	328.42	5.11	21.08	I	C	SP	P
VTS	83.192	318.99	5.11	21.08	I	C	SP	P
WET	83.279	328.78	5.08	20.95	I	C	SP	P
GRFO	83.537	329.98	5.08	20.95	E	C	LP	P
GRF	83.535	329.97	5.08	20.95	I	C	SP	P
MMB	83.613	317.98	5.08	20.95	I	C	SP	P
BHG	84.379	327.87	5.02	20.69	I	C	SP	P
VAY	84.422	318.40	5.02	20.69	I	C	SP	P
SKO	84.561	319.47	5.02	20.69	I	C	SP	P
ENN	84.697	333.37	5.02	20.69	I	C	SP	P
FUR	84.710	328.99	5.02	20.69	I	C	SP	P
STU	85.075	330.47	4.99	20.56	I	C	SP	P
GWF	85.526	331.43	4.96	20.43	I	C	SP	P
TRI	85.540	326.11	4.96	20.43	I	C	SP	P
OGA	85.835	328.32	4.90	20.17	I	C	SP	P
SLE	86.163	330.24	4.90	20.17	E	C	LP	P
SAX	86.231	329.47	4.90	20.17	E	C	LP	P
OSS	86.350	328.69	4.86	20.00	E	C	LP	P
ZUL	86.434	330.13	4.86	20.00	E	C	LP	P
LLS	86.680	329.43	4.86	20.00	E	C	LP	P

Table 89. Station data for event 6 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
VDL	86.791	328.94	4.83	19.87	I	C	LP P
TMA	87.343	329.04	4.80	19.74	E	C	LP P
MMK	87.761	329.52	4.77	19.61	E	C	LP P
DIX	87.963	329.85	4.77	19.61	E	C	LP P
TUL	90.616	42.95	4.70	19.32	I	C	SP P
RLO	90.846	42.32	4.69	19.27	I	C	SP P
BHO	92.255	43.42	4.66	19.14	I	C	SP P
RSCP	96.132	36.73	4.55	18.68	E	C	LP P
BNG	112.907	294.41	1.89	7.63	I	C	SP PKP
BUL	119.621	265.91	1.87	7.57	I	C	SP PKP
PRY	123.837	259.58	1.87	7.55	I	C	SP PKP
SEK	124.346	258.01	1.87	7.55	I	C	SP PKP
BFS	124.370	259.95	1.87	7.55	I	C	SP PKP
BLF	125.824	257.83	1.86	7.54	I	C	SP PKP
PEL	153.615	92.30	1.43	5.76	I	C	SP PKP

Table 90. Station data for event 63.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SEO	6.588	323.05	13.99	80.83	I	C	LP	P
MAT	6.628	49.58	13.99	80.83	I	D	SP	P
BAG	18.950	215.62	12.12	58.79	I	C	LP	P
PJG	22.131	144.75	9.92	44.43	I	D	SP	P
GUMO	22.131	144.75	9.92	44.43	E	D	LP	P
GUA	22.196	144.71	9.92	44.43	I	D	LP	P
DAV	25.858	194.62	9.37	41.39	E	C	LP	P
KKM	30.036	212.59	8.90	38.91	I	C	SP	P
CHG	32.542	253.56	8.71	37.92	I	C	LP	P
CHG	32.542	253.56	8.71	37.92	I	C	SP	P
NST	33.311	247.61	8.64	37.57	I	C	SP	P
SNG	38.435	236.09	8.35	36.10	I	C	LP	P
IPM	40.016	232.81	8.26	35.65	I	C	SP	P
RAB	41.134	148.39	8.21	35.40	I	D	LP	P
LAT	41.382	157.03	8.18	35.26	I	D	SP	P
ADK	41.784	46.62	8.15	35.11	I	D	SP	P
PPI	44.207	228.62	8.04	34.57	I	C	SP	P
KNA	47.951	184.12	7.81	33.44	I	D	SP	P
HNR	49.432	142.42	7.69	32.86	E	D	LP	P
WB2	52.076	177.13	7.49	31.91	I	D	SP	P
ISQ	53.292	171.11	7.37	31.34	I	D	SP	P
CTA	53.937	163.30	7.33	31.15	I	D	LP	P
CTAO	53.937	163.30	7.33	31.15	I	D	LP	P
MBL	54.482	193.92	7.29	30.96	I	D	SP	P
QUE	54.808	286.21	7.25	30.77	I	C	LP	P
PMR	56.920	34.07	7.10	30.07	I	D	SP	P
COL	57.105	30.05	7.10	30.07	I	D	LP	P
INK	61.973	24.83	6.71	28.26	I	D	SP	P
HON	62.493	81.17	6.67	28.08	E	D	LP	P
KLG	63.598	190.07	6.59	27.71	I	D	SP	P
BAL	64.283	194.57	6.51	27.35	I	D	SP	P
STK	64.559	170.92	6.51	27.35	I	D	SP	P
CMS	64.862	166.91	6.47	27.17	I	D	SP	P
KEV	64.931	338.20	6.47	27.17	I	C	LP	P
KLB	65.023	193.34	6.47	27.17	I	D	SP	P
COO	65.403	161.12	6.43	26.98	I	D	SP	P
NDF	66.198	132.02	6.39	26.80	I	D	SP	P
NWAO	66.421	193.48	6.34	26.58	I	D	LP	P
NWAO	66.421	193.48	6.34	26.58	I	D	SP	P
VUN	67.024	131.41	6.30	26.40	I	D	SP	P
KJF	67.158	332.59	6.30	26.40	I	C	LP	P
ADE	67.289	173.98	6.26	26.21	I	D	SP	P
YOU	68.082	165.37	6.22	26.03	I	D	SP	P
RIV	68.295	162.85	6.18	25.85	I	D	SP	P
CAN	69.218	165.14	6.14	25.68	I	D	SP	P
DAG	69.596	353.09	6.10	25.50	I	C	SP	P
BFD	69.898	171.00	6.06	25.32	I	D	SP	P
WAM	70.033	165.48	6.06	25.32	I	D	SP	P
NUR	70.204	329.86	6.06	25.32	I	C	LP	P
TOO	70.727	168.63	6.03	25.18	I	D	SP	P

Table 90. Station data for event 63 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
AFI	70.801	121.21	5.99	25.00	I	D	LP P
RSNT	71.611	26.69	5.95	24.83	I	D	SP P
RSNT	71.611	26.69	5.95	24.83	I	D	LP P
UPP	73.486	331.33	5.81	24.20	I	C	SP P
TAU	76.236	168.43	5.64	23.45	I	D	LP P
KONO	76.751	333.84	5.58	23.19	I	C	LP P
CEA	76.777	317.45	5.58	23.19	I	C	SP P
PNT	76.830	39.62	5.58	23.19	I	D	SP P
TLB	76.851	314.58	5.58	23.19	I	C	SP P
VRI	76.935	316.20	5.58	23.19	I	C	SP P
PSN	77.247	313.73	5.58	23.19	I	C	SP P
HNM	77.302	318.18	5.55	23.06	I	C	SP P
MLR	77.601	316.18	5.55	23.06	I	C	SP P
EDM	77.692	34.00	5.55	23.06	I	D	SP P
BUC	78.108	315.20	5.51	22.88	I	C	SP P
BUC1	78.185	315.17	5.51	22.88	I	C	SP P
KRA	78.283	322.38	5.48	22.75	I	C	SP P
VLR	78.433	318.20	5.48	22.75	I	C	SP P
GDH	78.594	1.99	5.48	22.75	I	C	SP P
GDH	78.594	1.99	5.48	22.75	E	C	LP P
COZ	78.630	316.68	5.48	22.75	I	C	SP P
NEW	78.787	39.52	5.45	22.62	I	D	SP P
JOS	78.901	320.86	5.45	22.62	I	C	SP P
MUD	79.105	331.62	5.45	22.62	I	C	SP P
DEV	79.134	317.75	5.45	22.62	I	C	SP P
PVL	79.373	314.52	5.41	22.44	I	C	SP P
RXF	79.484	38.21	5.41	22.44	I	D	LP P
LHD	79.625	38.88	5.41	22.44	I	D	LP P
LDM	79.633	38.63	5.41	22.44	I	D	LP P
KSP	79.636	324.48	5.41	22.44	I	C	SP P
CLO	79.663	317.12	5.41	22.44	I	C	SP P
WDC	80.042	48.17	5.35	22.18	I	D	SP P
KDZ	80.117	313.18	5.35	22.18	I	C	SP P
SES	80.590	35.31	5.30	21.96	I	D	SP P
VTS	80.873	314.91	5.25	21.74	I	C	SP P
CLL	80.917	326.20	5.25	21.74	I	C	SP P
PRU	81.045	324.54	5.25	21.74	I	C	SP P
MMB	81.142	313.85	5.25	21.74	I	C	SP P
VIE	81.248	322.41	5.25	21.74	I	C	LP P
VKA	81.259	322.44	5.21	21.57	I	C	SP P
SOP	81.504	321.88	5.21	21.57	I	C	SP P
FFC	81.660	28.29	5.21	21.57	I	D	SP P
MOX	82.014	326.29	5.17	21.40	I	C	LP P
HOF	82.115	325.93	5.17	21.40	I	C	SP P
WET	82.415	324.61	5.14	21.27	I	C	SP P
KMR	82.512	323.23	5.14	21.27	I	C	LP P
GRFO	82.851	325.76	5.11	21.14	I	C	LP P
JAS	82.884	49.41	5.11	21.14	I	D	LP P
JAS1	82.908	49.42	5.11	21.14	I	D	SP P
ARO	83.173	279.26	5.11	21.14	I	C	LP P

Table 90. Station data for event 63 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
WTS	83.237	329.39	5.11	21.14	I	C	SP	P
SNZO	83.248	149.00	5.11	21.14	I	D	LP	P
BHG	83.366	323.54	5.08	21.01	I	C	SP	P
BMN	83.422	45.91	5.08	21.01	I	D	SP	P
KBA	83.558	322.85	5.08	21.01	I	C	SP	P
TNS	83.772	327.39	5.05	20.88	I	C	SP	P
DBN	83.856	330.20	5.05	20.88	I	C	LP	P
FUR	83.862	324.61	5.05	20.88	I	C	SP	P
FRI	83.914	49.85	5.05	20.88	I	D	SP	P
MNA	84.047	47.95	5.05	20.88	I	D	SP	P
STB	84.231	328.39	5.05	20.88	I	C	SP	P
KLL	84.428	328.67	5.02	20.75	I	C	SP	P
STU	84.445	326.01	5.02	20.75	I	C	SP	P
STU	84.445	326.01	5.02	20.75	I	C	LP	P
ENN	84.510	328.93	5.02	20.75	I	C	SP	P
MEM	84.588	328.79	5.02	20.75	I	C	SP	P
OGA	84.873	323.77	4.99	20.62	I	C	SP	P
GWF	85.036	326.89	4.99	20.62	I	C	SP	P
WLF	85.210	328.06	4.99	20.62	E	C	LP	P
SAX	85.437	324.84	4.96	20.49	E	C	LP	P
OSS	85.437	324.06	4.96	20.49	E	C	LP	P
DOU	85.581	329.10	4.96	20.49	E	C	LP	P
CDF	85.600	326.66	4.96	20.49	I	C	SP	P
LLS	85.875	324.74	4.90	20.23	E	C	LP	P
BSF	86.243	326.49	4.90	20.23	I	C	SP	P
BDW	86.362	40.43	4.86	20.06	I	D	SP	P
TMA	86.472	324.25	4.86	20.06	E	C	LP	P
MMK	86.957	324.66	4.82	19.88	E	C	LP	P
DIX	87.207	324.96	4.82	19.88	E	C	LP	P
RSON	87.862	26.97	4.77	19.67	E	D	LP	P
RSON	87.862	26.97	4.77	19.67	I	D	SP	P
LOR	88.007	327.56	4.77	19.67	I	C	SP	P
LBF	88.165	327.31	4.77	19.67	I	C	SP	P
SSF	88.322	327.60	4.75	19.58	I	C	SP	P
GRC	88.341	327.98	4.75	19.58	I	C	SP	P
RSSD	88.352	36.67	4.75	19.58	I	D	SP	P
RSSD	88.352	36.67	4.75	19.58	I	D	LP	P
SMF	88.480	327.15	4.75	19.58	I	C	SP	P
AVF	88.595	327.50	4.75	19.58	I	C	SP	P
BGF	89.000	327.61	4.73	19.50	I	C	SP	P
MZF	89.377	327.52	4.71	19.41	I	C	SP	P
LSF	89.826	328.10	4.71	19.41	I	C	SP	P
CAF	90.593	326.96	4.70	19.37	I	C	SP	P
GOL	90.772	40.50	4.69	19.33	I	D	LP	P
GLD	90.819	40.38	4.69	19.33	I	D	LP	P
LFF	91.188	327.69	4.69	19.33	I	C	SP	P
ANMO	93.459	44.51	4.63	19.07	I	D	LP	P
ALQ	93.461	44.51	4.63	19.07	I	D	LP	P
TOL	97.353	327.38	4.52	18.60	E	C	LP	P
BLA	104.460	26.19	4.45	18.30	E	D	LP	Pdf

Table 90. Station data for event 63 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BUL	111.454	259.22	1.89	7.66	I	D	SP	PKP
SLR	114.230	253.97	1.88	7.64	I	D	SP	PKP
*BPI	114.624	253.64	1.88	7.63	I	D	SP	PKP
KSR	115.414	254.43	1.88	7.63	I	D	SP	PKP
SEK	115.851	251.67	1.88	7.62	I	D	SP	PKP
BFS	115.939	253.45	1.88	7.62	I	D	SP	PKP
VIR	116.364	252.22	1.88	7.62	I	D	SP	PKP
BLF	117.322	251.44	1.88	7.62	I	C	SP	PKP
NNA	146.675	59.06	1.64	6.65	I	D	SP	PKP
BAO	163.325	359.79	1.02	4.11	I	D	SP	PKP

Table 91. Station data for event 71.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SHK	4.136	253.74	14.21	45.47	I	C	LP	P
SEO	8.638	284.95	13.89	44.18	I	D	LP	P
CN2	12.228	314.51	13.47	42.52	I	D	SP	P
SNY	12.407	303.25	13.40	42.24	I	D	SP	P
DL2	12.999	288.55	13.32	41.93	I	D	SP	P
SSE	14.391	255.67	13.08	41.01	I	C	LP	P
NJ2	15.911	261.80	12.81	39.99	I	C	SP	P
ANP	17.332	236.81	12.52	38.91	I	C	LP	P
BJI	17.338	290.54	12.52	38.91	I	D	LP	P
QZH	19.529	241.59	12.10	37.38	I	C	SP	P
TIY	20.155	282.90	10.48	31.72	I	C	SP	P
BTO	22.077	290.84	9.97	30.01	I	D	SP	P
GUMO	23.080	161.43	9.78	29.38	E	C	LP	P
GUA	23.139	161.35	9.78	29.38	I	C	LP	P
BAG	24.484	222.34	9.55	28.63	I	C	LP	P
PLP	27.009	207.91	9.29	27.78	I	C	SP	P
GTA	29.926	288.35	8.92	26.58	I	C	SP	P
KM1	31.636	260.08	8.79	26.17	I	C	SP	P
CHG	37.911	253.87	8.39	24.89	I	C	LP	P
NST	38.844	248.73	8.33	24.70	I	C	SP	P
SNG	44.138	238.76	8.05	23.82	I	C	LP	P
MKS	44.154	206.25	8.05	23.82	I	C	SP	P
PMG	45.863	166.65	7.94	23.48	I	C	LP	P
NDI	50.786	280.00	7.59	22.38	I	C	SP	P
COL	51.835	31.56	7.50	22.10	E	C	LP	P
WB3	55.479	183.58	7.22	21.24	I	C	SP	P
CTA	56.180	170.07	7.19	21.14	I	C	LP	P
ISQ	56.220	177.67	7.19	21.14	I	C	SP	P
HON	57.538	85.91	7.08	20.81	E	C	LP	P
POO	58.234	270.78	7.04	20.68	I	C	SP	P
QUE	58.279	286.30	7.00	20.56	I	C	SP	P
MHI	61.332	295.76	6.77	19.86	I	C	LP	P
WBN	62.442	191.06	6.69	19.61	I	C	SP	P
KEV	63.469	338.62	6.60	19.34	E	N	LP	P
NOU	63.953	150.06	6.56	19.22	I	C	SP	P
DAG	66.732	354.21	6.36	18.61	I	C	SP	P
ADE	70.392	178.94	6.04	17.64	I	C	SP	P
YOU	70.435	170.44	6.04	17.64	I	C	SP	P
CAN	71.546	170.09	5.96	17.40	I	C	SP	P
COR	71.686	47.99	5.96	17.40	I	C	SP	P
EDM	72.265	36.61	5.89	17.19	I	C	SP	P
BFD	72.739	175.77	5.89	17.19	I	C	SP	P
YKM	73.626	41.22	5.82	16.98	I	D	LP	P
RXF	73.939	40.98	5.79	16.89	I	D	LP	P
LDM	74.078	41.41	5.79	16.89	E	D	LP	P
GDH	74.963	4.05	5.72	16.68	I	C	SP	P
COP	77.571	331.65	5.56	16.20	E	C	LP	P
VRI	77.583	318.01	5.56	16.20	I	C	SP	P
SPC	78.750	323.50	5.45	15.87	I	C	SP	P
JOS	79.075	322.85	5.45	15.87	I	C	SP	P

Table 91. Station data for event 71 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
JMB	79.812	315.38	5.37	15.63	I	D	SP	P
PVL	80.174	316.59	5.37	15.63	I	D	SP	P
-BRG	80.463	327.62	5.31	15.45	I	C	SP	P
BUD	80.511	322.80	5.31	15.45	I	D	SP	P
TIM	80.592	320.46	5.31	15.45	I	C	SP	P
KDZ	81.046	315.34	5.27	15.33	I	C	SP	P
SOP	81.565	324.13	5.22	15.18	I	C	SP	P
HOF	81.769	328.22	5.18	15.06	I	C	SP	P
YER	82.176	310.37	5.18	15.06	I	C	SP	P
WET	82.199	326.94	5.18	15.06	I	C	SP	P
KMR	82.432	325.57	5.15	14.97	I	C	LP	P
VAY	82.829	316.49	5.12	14.88	I	C	SP	P
SKO	83.018	317.54	5.12	14.88	I	C	SP	P
ESK	83.226	338.61	5.12	14.88	I	C	SP	P
KBA	83.512	325.30	5.09	14.80	I	C	SP	P
TRI	84.321	324.15	5.03	14.62	I	C	SP	P
UCC	84.429	332.26	5.03	14.62	E	C	LP	P
HLW	84.728	303.07	5.03	14.62	I	C	SP	P
OGA	84.728	326.34	5.03	14.62	I	C	SP	P
SLE	85.154	328.25	4.99	14.50	E	C	LP	P
SAX	85.183	327.47	4.99	14.50	E	C	LP	P
OSS	85.261	326.69	4.96	14.41	E	C	LP	P
ZUL	85.419	328.12	4.96	14.41	E	C	LP	P
DMU	85.530	339.78	4.96	14.41	I	C	SP	P
LLS	85.629	327.41	4.96	14.41	E	C	LP	P
VDL	85.714	326.91	4.96	14.41	E	C	LP	P
TMA	86.271	326.99	4.87	14.14	E	C	LP	P
ETA	86.387	338.83	4.87	14.14	I	C	SP	P
OBO	86.451	282.11	4.87	14.14	I	D	SP	P
MMK	86.713	327.44	4.87	14.14	E	C	LP	P
ECP	86.887	338.67	4.83	14.02	I	C	SP	P
DIX	86.932	327.76	4.83	14.02	E	C	LP	P
ARO	87.071	282.00	4.83	14.02	E	C	LP	P
GRC	87.761	330.88	4.78	13.88	I	C	SP	P
OTT	93.806	22.75	4.62	13.40	I	C	SP	P
BLA	99.305	29.81	4.47	12.96	I	C	LP	P
SHA	101.195	38.88	4.45	12.90	E	C	LP	P

Table 92. Station data for event 73.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
HJJ	1.690	238.22	14.14	93.00	I	D	SP	P
CHO	1.798	342.71	14.14	93.00	I	C	SP	P
OSH	1.910	293.84	14.15	92.09	I	C	SP	P
DDR	2.745	317.04	14.16	90.00	I	C	SP	P
KMG	2.751	321.51	14.16	90.00	I	C	SP	P
ONA	2.972	350.79	14.16	90.00	I	C	SP	P
FKS	3.834	347.76	14.14	87.00	I	C	SP	P
GIF	4.141	290.93	14.13	86.31	I	C	SP	P
YAM	4.339	347.94	14.12	85.72	I	C	SP	P
ISN	4.413	357.99	14.11	85.21	I	C	SP	P
OSK	4.871	278.76	14.09	84.32	I	C	SP	P
AKI	5.810	349.28	14.02	81.95	I	C	SP	P
MRT	6.155	264.98	14.02	81.95	I	C	LP	P
AOM	6.822	355.42	13.94	79.90	I	C	SP	P
SHK	7.323	276.58	13.90	79.02	I	C	LP	P
MVI	12.063	230.22	13.38	70.90	I	C	SP	P
SEO	12.325	290.89	13.31	70.05	I	C	LP	P
SSE	17.371	265.98	12.43	61.39	I	C	LP	P
ISI	17.923	242.02	12.33	60.55	E	C	LP	P
ANP	19.450	248.42	10.54	48.11	I	C	LP	P
GUA	20.609	170.54	10.27	46.49	I	C	LP	P
PIP	24.320	235.30	9.52	42.25	I	C	SP	P
BAG	25.703	232.20	9.41	41.65	I	C	LP	P
HKC	26.683	251.22	9.32	41.16	I	C	SP	P
DAV	30.563	212.38	8.85	38.68	I	C	LP	P
KMI	34.690	265.69	8.58	37.30	E	C	LP	P
RAB	39.300	163.05	8.29	35.84	I	C	LP	P
CHG	40.706	259.21	8.23	35.54	I	C	LP	P
CHG	40.706	259.21	8.23	35.54	I	C	SP	P
NST	41.409	254.26	8.18	35.29	I	C	SP	P
BDT	41.468	257.13	8.18	35.29	I	C	SP	P
PMG	43.501	171.88	8.07	34.75	I	C	LP	P
SNG	46.187	244.16	7.93	34.06	I	C	SP	P
SNG	46.187	244.16	7.93	34.06	I	C	LP	P
TTA	47.892	33.16	7.81	33.48	I	D	SP	P
PKI	48.112	278.25	7.81	33.48	I	C	SP	P
KKN	48.136	278.57	7.81	33.48	I	C	SP	P
DMN	48.347	278.43	7.77	33.28	I	C	SP	P
IMA	49.278	29.16	7.69	32.90	I	D	SP	P
KDC	49.386	40.20	7.69	32.90	I	D	SP	P
PMR	51.036	35.15	7.57	32.32	I	D	SP	P
COL	51.645	30.89	7.53	32.13	I	D	LP	P
COL	51.645	30.89	7.53	32.13	I	D	SP	P
FBA	51.645	30.89	7.53	32.13	I	D	SP	P
CTA	53.974	174.47	7.33	31.18	I	C	SP	P
CTAO	53.974	174.47	7.33	31.18	I	C	LP	P
HON	54.358	86.85	7.29	30.99	I	D	LP	P
PNL	55.992	36.96	7.17	30.42	I	D	SP	P
INK	57.061	26.19	7.10	30.09	I	D	SP	P
HYB	58.244	270.36	7.03	29.77	I	C	SP	P

Table 92. Station data for event 73 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
KOU	58.436	154.80	6.99	29.58	I	D	SP P
MBC	59.413	15.93	6.91	29.21	I	D	SP P
NOU	60.825	153.42	6.79	28.66	I	D	SP P
POO	61.604	274.02	6.75	28.47	I	C	SP P
KOD	62.853	263.98	6.63	27.92	I	C	SP P
MHI	65.077	298.09	6.47	27.19	I	D	LP P
AFI	65.159	128.83	6.47	27.19	I	D	LP P
PHC	65.182	44.47	6.47	27.19	I	D	SP P
CMS	65.261	175.93	6.43	27.01	I	C	SP P
KEV	66.303	339.76	6.34	26.60	I	D	SP P
KEV	66.303	339.76	6.34	26.60	I	D	LP P
RSNT	66.413	29.48	6.34	26.60	I	D	LP P
RIV	68.076	171.34	6.22	26.06	I	D	SP P
ADE	68.654	182.46	6.18	25.88	I	C	SP P
DAG	68.807	355.22	6.14	25.70	I	D	LP P
DAG	68.807	355.22	6.14	25.70	I	D	SP P
KJF	69.278	334.65	6.10	25.52	I	D	LP P
MUN	69.815	202.76	6.06	25.34	I	C	LP P
LON	70.272	46.52	6.03	25.21	I	D	LP P
NWAO	70.373	201.53	6.03	25.21	I	C	LP P
COR	70.391	49.07	6.03	25.21	I	D	SP P
EDM	71.690	37.69	5.95	24.85	I	D	SP P
NEW	72.269	43.46	5.88	24.54	I	D	SP P
NUR	72.661	332.45	5.88	24.54	I	D	LP P
YKM	72.752	42.41	5.85	24.40	I	D	LP P
WDC	72.846	52.45	5.85	24.40	I	D	SP P
RXF	73.079	42.19	5.85	24.40	I	D	LP P
LHD	73.160	42.89	5.85	24.40	I	D	LP P
LDM	73.191	42.62	5.85	24.40	I	D	LP P
SHI	73.332	294.69	5.81	24.23	I	D	SP P
CLX	73.426	42.77	5.81	24.23	I	D	LP P
TAB	73.584	304.96	5.81	24.23	I	D	LP P
BKS	74.423	54.75	5.74	23.92	I	D	SP P
SES	74.448	39.33	5.74	23.92	I	D	SP P
JAS	75.599	53.92	5.67	23.61	I	D	LP P
JAS1	75.622	53.93	5.67	23.61	I	D	SP P
UPP	75.711	334.38	5.67	23.61	I	D	SP P
HRY	76.121	42.77	5.64	23.47	I	D	SP P
FFC	76.222	32.31	5.64	23.47	I	D	SP P
LRM	76.277	43.78	5.61	23.34	I	D	SP P
BMN	76.378	50.38	5.61	23.34	I	D	SP P
GDH	76.462	5.46	5.61	23.34	I	D	LP P
GDH	76.462	5.46	5.61	23.34	I	D	SP P
FRI	76.598	54.44	5.61	23.34	I	D	SP P
LCCM	76.596	43.53	5.61	23.34	I	D	SP P
SXM	76.798	42.99	5.58	23.21	I	D	SP P
MNA	76.857	52.51	5.58	23.21	I	D	SP P
KONO	78.598	337.32	5.48	22.77	I	D	LP P
PPE	80.389	319.91	5.30	21.98	I	D	SP P
COP	80.668	333.53	5.30	21.98	I	D	SP P

Table 92. Station data for event 73 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
CFR	80.755	318.86	5.25	21.76	I	D	SP P
CEA	80.778	321.25	5.25	21.76	I	D	SP P
SNZO	80.927	155.30	5.25	21.76	I	D	LP P
HNM	81.208	322.03	5.25	21.76	I	D	SP P
ANTO	81.356	312.49	5.21	21.59	I	D	LP P
KRA	81.649	326.28	5.21	21.59	I	D	SP P
RSSD	82.049	41.45	5.17	21.42	I	D	LP P
SPC	82.113	325.51	5.17	21.42	I	D	SP P
JOS	82.456	324.87	5.14	21.29	I	D	SP P
BUC1	82.452	319.20	5.14	21.29	I	D	SP P
DMK	83.125	316.43	5.11	21.15	I	D	SP P
PSZ	83.168	324.76	5.11	21.15	I	D	SP P
HAM	83.310	333.23	5.08	21.02	I	D	SP P
BRG	83.698	329.64	5.08	21.02	I	D	SP P
PVL	83.710	318.70	5.08	21.02	I	D	SP P
CLL	83.761	330.38	5.05	20.89	I	D	SP P
BUD	83.892	324.86	5.05	20.89	I	D	SP P
BNT	83.972	315.23	5.05	20.89	I	D	SP P
SRO	83.995	325.44	5.05	20.89	I	D	SP P
DST	84.035	314.30	5.05	20.89	I	D	SP P
PRU	84.107	328.76	5.05	20.89	I	D	SP P
ZST	84.283	326.30	5.02	20.76	I	D	SP P
VIE	84.585	326.70	5.02	20.76	I	D	LP P
VKA	84.593	326.73	5.02	20.76	I	D	SP P
KDZ	84.608	317.48	5.02	20.76	I	D	SP P
JER	84.665	304.81	5.02	20.76	I	D	SP P
MOX	84.835	330.62	4.99	20.64	I	D	LP P
SOP	84.908	326.21	4.99	20.64	I	D	SP P
HOF	84.984	330.28	4.99	20.64	I	D	SP P
ELL	85.067	311.44	4.99	20.64	I	D	SP P
KHC	85.166	328.66	4.99	20.64	I	D	SP P
WET	85.455	329.02	4.96	20.51	I	D	SP P
XSO	85.622	340.27	4.96	20.51	I	D	SP P
WTS	85.632	333.84	4.96	20.51	I	D	SP P
GRF	85.733	330.21	4.96	20.51	I	D	SP P
GRFO	85.735	330.21	4.96	20.51	E	D	LP P
KMR	85.731	327.67	4.96	20.51	I	D	LP P
ESK	86.041	340.66	4.90	20.25	I	D	SP P
DBN	86.134	334.72	4.90	20.25	I	D	LP P
ECK	86.138	340.56	4.90	20.25	I	D	SP P
XAL	86.162	339.94	4.90	20.25	I	D	SP P
LHC	86.273	31.14	4.86	20.07	I	D	SP P
BNS	86.327	333.04	4.86	20.07	I	D	SP P
VAY	86.367	318.65	4.86	20.07	I	D	SP P
ALQ	86.493	49.73	4.86	20.07	I	D	LP P
ANMO	86.491	49.72	4.86	20.07	I	D	LP P
SKO	86.532	319.71	4.86	20.07	I	D	SP P
BHG	86.538	328.09	4.86	20.07	I	D	SP P
KOE	86.548	332.43	4.86	20.07	I	D	SP P
KBA	86.819	327.43	4.82	19.90	I	D	SP P

Table 92. Station data for event 73 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
XDE	86.833	340.42	4.82	19.90	I	D	SP	P
BGG	86.875	332.50	4.82	19.90	I	D	SP	P
FUR	86.890	329.21	4.82	19.90	I	D	SP	P
ENN	86.954	333.57	4.82	19.90	I	D	SP	P
LJU	87.056	326.13	4.82	19.90	I	D	SP	P
STU	87.282	330.67	4.80	19.82	I	D	LP	P
UCC	87.498	334.40	4.80	19.82	E	D	LP	P
TRI	87.663	326.31	4.80	19.82	I	D	SP	P
WLF	87.764	332.80	4.77	19.69	E	D	LP	P
ATH	87.997	315.60	4.77	19.69	I	D	SP	P
DOU	87.992	333.88	4.77	19.69	E	D	LP	P
OGA	88.002	328.51	4.77	19.69	I	D	SP	P
SCH	88.257	15.93	4.75	19.60	I	D	SP	P
ECH	88.545	331.41	4.75	19.60	I	D	SP	P
GRC	90.879	333.14	4.69	19.34	I	D	SP	P
JCT	93.642	49.36	4.63	19.09	I	D	LP	P
RSNY	95.239	24.98	4.58	18.87	I	D	LP	P
SCP	97.206	29.04	4.53	18.66	I	D	LP	P
BLA	99.113	32.70	4.48	18.45	I	D	LP	P
SHA	100.413	41.87	4.45	18.32	I	D	LP	P
MAL	102.791	332.50	4.45	18.32	I	D	LP	Pdf
NAL	102.885	277.24	4.45	18.32	I	D	SP	Pdf
SEK	123.995	256.51	1.87	7.58	I	C	SP	PKP
VIR	124.514	257.10	1.87	7.57	I	C	SP	PKP
BLF	125.464	256.24	1.87	7.57	I	C	SP	PKP
ARE	145.624	67.72	1.66	6.74	I	D	LP	PKP
LPB	148.241	64.17	1.62	6.55	I	C	SP	PKP
ANT	150.329	78.22	1.56	6.32	I	D	LP	PKP
TLL	152.425	90.97	1.50	6.06	I	D	LP	PKP
PEL	153.224	97.24	1.46	5.93	I	D	SP	PKP
LPA	163.942	98.69	0.96	3.90	I	D	LP	PKP

Table 93. Station data for event 74.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KYS	1.636	317.14	14.22	91.49	I	C	SP	P
TAT	1.670	306.31	14.22	91.49	I	C	SP	P
YOK	2.091	313.67	14.22	91.49	I	C	SP	P
AJI	2.244	298.21	14.22	91.49	I	C	SP	P
OYM	2.340	307.80	14.22	91.49	I	C	SP	P
MIS	2.397	298.20	14.22	91.49	I	C	SP	P
SRY	2.437	311.70	14.22	91.49	I	C	SP	P
DDR	2.751	317.00	14.21	92.61	I	C	SP	P
KMG	2.757	321.46	14.21	92.61	I	C	SP	P
IID	3.376	297.47	14.19	85.99	I	C	SP	P
SHK	7.329	276.60	13.93	78.32	I	C	LP	P
SEO	12.331	290.90	13.34	69.69	I	D	SP	P
SEO	12.331	290.90	13.34	69.69	I	C	LP	P
SSE	17.376	265.99	12.46	61.16	E	C	LP	P
ANP	19.455	248.44	10.56	47.93	I	C	LP	P
GUA	20.605	170.55	10.29	46.33	E	C	LP	P
BAG	25.706	232.22	9.42	41.47	I	C	LP	P
DAV	30.563	212.40	8.85	38.47	I	C	LP	P
KM1	34.696	265.70	8.58	37.10	E	C	LP	P
CHG	40.711	259.22	8.23	35.35	I	C	LP	P
CHG	40.711	259.22	8.23	35.35	I	C	SP	P
MKS	44.219	212.40	8.04	34.42	I	C	SP	P
SNG	46.191	244.17	7.93	33.88	E	C	LP	P
HNR	46.605	154.56	7.90	33.74	E	D	LP	P
PSI	50.429	241.27	7.61	32.34	I	D	SP	P
COL	51.645	30.89	7.53	31.96	I	D	LP	P
CTA	53.971	174.48	7.33	31.02	I	D	SP	P
CTAO	53.971	174.48	7.33	31.02	I	C	LP	P
HON	54.353	86.85	7.29	30.83	I	D	LP	P
NDI	54.380	283.12	7.29	30.83	I	C	SP	P
MBC	59.414	15.93	6.92	29.11	I	D	SP	P
POO	61.610	274.02	6.76	28.37	I	C	SP	P
QUE	61.967	288.99	6.72	28.19	I	C	LP	P
KBS	63.665	350.42	6.59	27.60	I	C	LP	P
MHI	65.084	298.10	6.47	27.05	I	C	LP	P
KEV	66.308	339.76	6.35	26.51	E	D	LP	P
RSNT	66.413	29.48	6.35	26.51	E	D	LP	P
YOU	68.220	173.87	6.22	25.93	I	D	SP	P
DAG	68.810	355.22	6.14	25.57	I	D	SP	P
CAN	69.310	173.46	6.10	25.39	I	D	SP	P
WAM	70.163	173.66	6.06	25.22	I	D	SP	P
NWAQ	70.372	201.54	6.03	25.08	I	C	LP	P
COR	70.389	49.07	6.03	25.08	I	C	SP	P
IR5	72.033	300.60	5.92	24.59	I	D	SP	P
NEW	72.267	43.46	5.88	24.42	I	D	SP	P
YKM	72.751	42.41	5.85	24.28	I	D	LP	P
WDC	72.843	52.46	5.85	24.28	I	D	SP	P
LHD	73.158	42.89	5.85	24.28	I	D	LP	P
CLX	73.425	42.77	5.81	24.11	I	D	LP	P
TAB	73.590	304.96	5.81	24.11	E	C	LP	P

Table 93. Station data for event 74 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BKS	74.420	54.75	5.74	23.80	I	D	SP	P
LRM	76.275	43.78	5.61	23.23	I	D	SP	P
GDH	76.465	5.46	5.61	23.23	E	D	LP	P
BHD	77.431	301.60	5.55	22.96	I	D	SP	P
KONO	78.603	337.32	5.48	22.66	E	C	LP	P
COP	80.673	333.54	5.30	21.88	I	D	SP	P
CEA	80.784	321.25	5.26	21.70	I	C	SP	P
SNZO	80.922	155.31	5.26	21.70	E	N	LP	P
MUD	81.240	335.47	5.26	21.70	I	D	SP	P
ANTO	81.363	312.49	5.21	21.49	I	C	LP	P
RSSD	82.047	41.45	5.17	21.31	E	D	LP	P
JOS	82.462	324.87	5.14	21.18	I	D	SP	P
RSON	82.529	31.67	5.14	21.18	E	D	LP	P
BRG	83.704	329.65	5.08	20.92	I	D	SP	P
CLL	83.767	330.39	5.05	20.79	I	D	SP	P
VKA	84.598	326.73	5.02	20.67	I	D	SP	P
JER	84.671	304.81	5.02	20.67	I	C	SP	P
SOP	84.913	326.21	4.99	20.54	I	D	SP	P
VTS	85.157	319.27	4.99	20.54	I	C	SP	P
KHC	85.171	328.67	4.99	20.54	I	D	SP	P
GRFO	85.741	330.21	4.96	20.41	E	C	LP	P
ANMO	86.488	49.73	4.86	19.98	I	D	LP	P
GWF	87.755	331.62	4.77	19.59	I	D	SP	P
SMF	91.133	332.35	4.69	19.25	I	C	SP	P
AVF	91.200	332.71	4.69	19.25	I	C	SP	P
LPF	91.729	335.90	4.68	19.21	I	C	SP	P
MZF	91.972	332.83	4.67	19.17	I	C	SP	P
LSF	92.339	333.47	4.66	19.12	I	C	SP	P
CAF	93.253	332.44	4.63	19.00	I	C	SP	P
SCP	97.206	29.04	4.53	18.57	E	D	LP	P
ARE	145.620	67.73	1.66	6.71	E	D	LP	PKP

Table 94. Station data for event 118.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ASJ	0.345	344.57	4.46	160.90	I	C	SP	P
NOB	0.423	84.69	5.34	156.91	I	C	SP	P
KUM	0.479	303.59	5.93	154.17	I	C	SP	P
OIT	0.780	28.19	8.54	141.14	I	C	SP	P
UNZ	0.799	284.32	8.68	140.38	I	D	SP	P
SAG	1.017	313.58	9.97	132.91	I	D	SP	P
NGS	1.124	279.88	10.48	129.70	I	D	SP	P
FKK	1.233	327.02	10.92	126.71	I	D	SP	P
SHN	1.419	351.84	11.51	122.35	I	C	SP	P
ASZ	1.556	83.19	11.85	119.49	I	C	SP	P
MTY	1.860	45.59	12.42	114.23	I	C	SP	P
FKJ	1.990	275.08	12.60	112.32	I	D	SP	P
HIR	2.094	29.67	12.72	110.96	I	C	SP	P
KOC	2.217	62.40	12.84	109.42	I	C	SP	P
IZU	2.288	316.81	12.90	108.67	I	D	SP	P
SHK	2.342	31.78	12.95	108.06	I	C	SP	P
HMD	2.457	17.32	13.03	106.85	I	C	SP	P
MRT	2.615	73.64	13.14	105.29	I	C	SP	P
TKM	2.983	52.90	13.31	102.26	I	C	SP	P
OKA	3.120	46.18	13.36	101.24	I	C	SP	P
TKS	3.220	61.00	13.38	100.64	I	C	SP	P
MTS	3.299	27.86	13.41	100.16	I	C	SP	P
HIM	3.718	51.11	13.50	97.54	I	C	SP	P
WKY	3.730	62.20	13.50	97.46	I	C	SP	P
TOT	3.865	39.22	13.52	96.88	I	C	SP	P
OSA	4.198	58.37	13.56	95.30	I	C	SP	P
TYK	4.245	44.41	13.56	95.12	I	C	SP	P
KYO	4.518	55.77	13.59	93.78	I	C	SP	P
TSU	4.943	62.76	13.61	92.45	I	C	SP	P
MAT	7.034	53.55	13.57	85.26	I	C	SP	P
DL2	10.027	311.93	13.33	78.11	I	D	SP	P
SNY	11.068	328.98	13.21	75.93	I	D	SP	P
ANP	11.202	231.56	13.19	75.65	I	C	LP	P
CN2	12.105	339.81	13.07	73.73	I	D	SP	P
QZH	13.386	238.75	12.89	71.22	I	C	SP	P
XAN	18.670	280.65	10.40	49.76	I	C	SP	P
BAG	18.716	213.40	10.37	49.58	I	C	LP	P
CD2	23.365	273.36	9.58	44.72	I	C	SP	P
DAV	25.859	192.85	9.33	43.22	I	C	LP	P
KMI	25.940	260.78	9.32	43.18	E	C	LP	P
GTA	26.207	294.04	9.29	43.03	I	C	SP	P
CHG	31.972	252.62	8.70	39.73	I	C	SP	P
CHTO	31.972	252.62	8.70	39.73	I	C	LP	P
TRT	43.750	207.12	8.02	36.10	I	C	SP	P
KSH	44.604	295.11	7.99	35.90	I	C	SP	P
NDI	46.199	280.10	7.89	35.40	I	C	SP	P
POO	53.012	269.47	7.37	32.77	I	C	SP	
KOD	54.094	258.41	7.29	32.34	I	C	SP	P
QUE	54.146	285.83	7.28	32.33	I	C	LP	P
CTA	54.278	162.48	7.28	32.30	I	C	LP	P

Table 94. Station data for event 118 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
CTAO	54.278	162.48	7.28	32.30	I	C	LP	P
MBL	54.486	193.04	7.26	32.23	I	C	SP	P
ASPA	55.948	176.99	7.15	31.65	I	C	SP	P
MHI	58.003	295.26	7.00	30.94	I	C	SP	P
WBN	58.515	184.86	6.96	30.74	I	C	SP	P
KOU	61.562	144.41	6.72	29.55	I	C	SP	P
MRWA	63.085	194.88	6.59	28.96	I	C	SP	P
NOU	64.111	143.53	6.51	28.57	I	C	SP	P
KEV	64.544	338.05	6.48	28.40	E	C	LP	P
MUN	65.709	193.94	6.39	27.96	I	C	SP	P
NWAO	66.429	192.78	6.32	27.64	I	C	SP	P
NWAO	66.429	192.78	6.32	27.64	I	C	LP	P
ADE	67.518	173.32	6.23	27.22	I	C	SP	P
YOU	68.401	164.73	6.16	26.89	I	C	SP	P
DAG	69.360	352.92	6.08	26.52	I	C	SP	P
CAN	69.540	164.51	6.07	26.46	I	C	SP	P
TOO	71.012	168.01	5.96	25.95	I	C	SP	P
RSNT	71.757	26.49	5.91	25.72	E	C	LP	P
KONO	76.323	333.56	5.60	24.29	E	C	LP	P
LON	77.364	42.37	5.54	24.00	E	C	LP	P
KRA	77.763	322.06	5.51	23.86	I	C	SP	P
SPC	78.117	321.23	5.48	23.74	I	C	SP	P
GDH	78.456	1.71	5.46	23.66	E	C	LP	P
GZR	78.938	317.06	5.43	23.48	I	C	SP	P
KDZ	79.539	312.83	5.38	23.26	I	C	SP	P
SRO	79.972	320.90	5.32	23.02	I	C	SP	P
VTS	80.304	314.56	5.29	22.86	I	C	SP	P
WDC	80.414	47.86	5.28	22.81	I	C	SP	P
CLL	80.426	325.87	5.28	22.80	I	C	SP	P
PRU	80.542	324.20	5.27	22.76	I	C	SP	P
VKA	80.740	322.10	5.25	22.68	I	C	SP	P
SOP	80.981	321.54	5.23	22.60	I	C	SP	P
MOX	81.524	325.95	5.19	22.40	I	C	SP	P
KHC	81.576	323.95	5.19	22.38	I	C	SP	P
HOF	81.622	325.59	5.18	22.36	I	C	SP	P
SKO	81.730	314.82	5.17	22.32	I	C	SP	P
WET	81.912	324.27	5.16	22.25	I	C	SP	P
GRFO	82.357	325.41	5.13	22.13	E	C	LP	P
GRF	82.354	325.41	5.13	22.13	I	C	SP	P
BHG	82.855	323.19	5.10	21.99	I	C	SP	P
KBA	83.042	322.49	5.09	21.94	I	C	SP	P
FUR	83.359	324.25	5.07	21.85	I	C	SP	P
SCE	83.902	323.21	5.04	21.71	I	C	SP	P
STU	83.953	325.65	5.03	21.69	I	C	SP	P
ENN	84.041	328.57	5.03	21.67	I	C	SP	P
OGA	84.363	323.40	5.01	21.58	I	C	SP	P
GWF	84.550	326.52	5.00	21.53	I	C	SP	P
ORI	85.885	315.65	4.89	21.05	I	C	SP	P
RSON	88.010	26.59	4.76	20.46	E	C	LP	P
LDF	88.274	330.07	4.75	20.41	I	C	SP	P

Table 94. Station data for event 118 . continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
RSSD	88.607	36.28	4.74	20.35	E	C	LP	P
MZF	88.897	327.12	4.72	20.29	I	C	SP	P
TCF	89.013	327.37	4.72	20.28	I	C	SP	P
MFF	89.825	328.81	4.70	20.20	I	C	SP	P
LPO	90.699	326.87	4.70	20.18	I	C	SP	P
EPF	92.358	326.27	4.65	19.98	I	C	SP	P

Table 95. Station data for event 138.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
AOM	0.599	32.25	5.32	156.38	I	C	SP P
AKI	0.624	198.78	5.51	155.51	I	D	SP P
MRK	0.871	134.42	7.19	147.26	I	D	SP P
HAC	0.915	76.05	7.45	145.91	I	C	SP P
MIY	1.402	117.77	9.72	132.98	I	C	SP P
HAK	1.531	11.16	10.16	130.14	I	C	SP P
OFU	1.628	139.55	10.45	128.15	I	D	SP P
ISN	2.019	158.51	11.35	121.31	I	D	SP P
YAM	2.054	180.26	11.42	120.74	I	D	SP P
MRR	2.059	12.94	11.43	120.66	I	C	SP P
SEN	2.089	168.30	11.49	120.19	I	D	SP P
SUT	2.480	357.92	12.04	114.98	I	C	SP P
FKS	2.551	177.99	12.13	114.14	I	C	SP P
URA	2.595	43.86	12.17	113.63	I	C	SP P
SAP	2.840	14.50	12.41	110.97	I	C	SP P
OBI	3.376	38.49	12.75	106.29	I	C	SP P
RMJ	3.758	14.15	12.92	103.50	I	C	SP P
ASA	3.768	22.76	12.92	103.43	I	C	SP P
UTS	3.780	186.00	12.93	103.35	I	C	SP P
NGN	4.021	205.68	13.01	101.82	I	C	SP P
KUS	4.030	47.27	13.01	101.75	I	C	SP P
TSK	4.097	182.86	13.03	101.22	I	C	SP P
MAT	4.125	204.88	13.04	101.04	I	C	SP P
KMG	4.227	190.79	13.07	100.47	I	C	SP P
TOY	4.366	215.51	13.10	99.75	I	C	SP P
DDR	4.402	192.44	13.10	99.54	I	C	SP P
ABJ	4.713	36.91	13.16	98.02	I	C	SP P
KAN	4.756	218.99	13.17	97.74	I	C	SP P
SRY	4.772	190.72	13.17	97.64	I	C	SP P
NEM	4.933	50.61	13.20	96.72	I	C	SP P
OYM	4.961	190.63	13.20	96.75	I	C	SP P
WAK	5.194	10.26	13.22	95.64	I	C	SP P
IID	5.191	203.43	13.22	95.65	I	C	SP P
FUK	5.354	218.78	13.24	94.90	I	C	SP P
GIF	5.669	211.26	13.26	93.60	I	C	SP P
NAG	5.797	208.70	13.27	93.37	I	C	SP P
HIK	5.991	214.24	13.27	92.77	I	C	SP P
KYO	6.437	216.21	13.29	90.98	I	C	SP P
TYK	6.471	224.29	13.29	90.86	I	C	SP P
TOT	6.843	227.53	13.28	88.68	I	C	SP P
SAI	6.882	235.69	13.28	88.59	I	C	SP P
KOB	6.960	217.90	13.28	88.39	I	C	SP P
HIM	7.073	221.22	13.28	88.09	I	C	SP P
WKY	7.349	215.92	13.27	87.23	I	C	SP P
MTS	7.530	232.24	13.27	86.83	I	C	SP P
OKA	7.602	224.39	13.27	86.69	I	C	SP P
TKS	7.755	218.33	13.26	86.60	I	C	SP P
TKM	7.809	221.98	13.26	86.49	I	C	SP P
HMD	8.513	233.19	13.22	84.33	I	C	SP P
KOC	8.677	221.14	13.21	83.88	I	C	SP P

Table 95. Station data for event 138 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
SHN	9.836	232.80	13.12	80.92	I	C	SP P
OIT	9.946	227.50	13.11	80.65	I	C	SP P
FKK	10.432	233.06	13.06	79.45	I	C	SP P
SAG	10.707	231.97	13.04	78.80	I	C	SP P
IZU	10.717	238.83	13.03	78.77	I	C	SP P
SEO	10.789	259.58	13.03	78.59	I	C	LP P
KAG	11.790	225.37	12.92	76.43	I	C	SP P
SSE	18.056	245.38	10.56	52.64	I	C	LP P
BJI	18.478	277.02	10.46	51.94	I	C	LP P
ANP	21.813	231.97	9.75	47.23	I	C	LP P
SZP	28.466	222.96	8.96	42.42	I	D	SP P
LZH	28.875	273.44	8.92	42.17	I	C	SP P
BAG	29.359	221.49	8.87	41.87	I	C	LP P
KMI	34.803	255.82	8.52	39.85	E	C	LP P
DAV	35.628	205.78	8.47	39.58	E	C	LP P
CHTO	41.432	251.26	8.14	37.76	I	C	LP P
CHTO	41.432	251.26	8.14	37.76	I	C	SP P
NST	42.660	246.65	8.08	37.42	I	C	SP P
SHIO	42.743	265.13	8.07	37.40	I	C	LP P
NNT	45.077	243.87	7.94	36.69	I	C	SP P
AAI	45.179	197.25	7.93	36.65	I	C	SP P
PKI	46.649	271.86	7.84	36.18	I	C	SP P
COL	46.811	33.78	7.83	36.13	I	D	LP P
COL	46.811	33.78	7.83	36.13	I	D	SP P
DMN	46.861	272.09	7.83	36.11	I	C	SP P
MKS	49.205	207.98	7.66	35.19	I	C	SP P
IPM	50.155	235.39	7.58	34.79	I	C	SP P
INK	51.875	28.14	7.44	34.07	I	D	SP P
NDI	52.327	277.94	7.41	33.88	I	C	SP P
PSI	52.931	235.95	7.36	33.63	I	C	SP P
MTN	53.567	191.21	7.31	33.37	I	C	SP P
MBC	53.635	17.01	7.30	33.34	I	D	SP P
HON	55.131	90.63	7.19	32.74	I	D	LP P
KNA	56.797	193.37	7.07	32.14	I	C	SP P
KBS	57.306	349.62	7.03	31.93	I	D	LP P
KBS	57.306	349.62	7.03	31.93	I	D	SP P
HYB	57.549	265.71	7.01	31.84	I	C	SP P
KEV	60.101	338.37	6.82	30.86	E	D	LP P
WB2	60.194	186.52	6.81	30.82	I	C	SP P
CTA	60.327	173.62	6.80	30.77	I	C	SP P
BOM	61.058	270.86	6.74	30.47	I	C	SP P
MHI	61.458	294.77	6.71	30.31	I	C	SP P
DAG	62.459	354.69	6.63	29.91	I	D	LP P
DAG	62.459	354.69	6.63	29.91	I	C	SP P
KJF	63.228	333.10	6.57	29.61	I	D	SP P
PVC	63.337	150.01	6.56	29.57	I	C	SP P
ASPA	63.921	186.60	6.51	29.33	I	C	SP P
PNT	66.417	44.69	6.30	28.30	I	D	SP P
LON	66.662	47.90	6.28	28.21	I	D	LP P
NOU	66.865	153.71	6.26	28.13	I	C	SP P

Table 95. Station data for event 138 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
COR	67.020	50.49	6.25	28.07	I	D	SP	P
EDM	67.306	38.73	6.23	27.95	I	D	SP	P
ELD	67.902	36.42	6.18	27.72	I	D	SP	P
NEW	68.373	44.57	6.14	27.54	I	D	SP	P
FHC	68.767	54.15	6.11	27.38	I	D	SP	P
YKM	68.762	43.45	6.11	27.38	I	D	SP	P
RXF	69.069	43.20	6.09	27.27	I	D	SP	P
LDM	69.218	43.63	6.08	27.23	I	D	SP	P
LHD	69.210	43.90	6.08	27.23	I	D	SP	P
TAB	69.323	302.69	6.08	27.21	E	D	LP	P
CLX	69.465	43.76	6.07	27.16	I	D	SP	P
UPP	69.666	333.08	6.05	27.09	I	D	SP	P
WDC	69.789	53.66	6.04	27.04	I	D	SP	P
AFI	69.857	129.92	6.04	27.01	I	D	LP	P
SES	70.188	40.15	6.01	26.88	I	D	SP	P
GDH	70.282	5.22	6.00	26.84	I	D	SP	P
ORV	71.038	54.03	5.95	26.60	I	D	SP	P
FFC	71.407	32.83	5.92	26.46	I	D	SP	P
BRK	71.571	55.82	5.91	26.40	I	D	SP	P
GCC	72.245	56.40	5.87	26.19	I	D	SP	P
MHC	72.282	55.96	5.86	26.17	I	D	SP	P
MSL	72.364	302.85	5.85	26.14	I	D	SP	P
JAS1	72.696	54.85	5.83	26.03	I	D	SP	P
SAO	72.757	56.33	5.83	26.02	I	D	SP	P
MRWA	72.774	202.19	5.83	26.02	I	C	SP	P
AKU	73.028	350.86	5.81	25.93	I	D	SP	P
PRS	73.069	56.65	5.81	25.92	I	D	SP	P
BER	73.116	338.48	5.81	25.90	I	D	SP	P
PRI	73.636	56.44	5.76	25.70	I	D	SP	P
FRI	73.717	55.25	5.76	25.68	I	D	SP	P
FRB	73.782	12.94	5.76	25.67	I	D	SP	P
MNA	73.785	53.28	5.76	25.67	I	D	SP	P
COP	74.649	332.40	5.70	25.40	E	D	LP	P
ADE	74.912	181.41	5.68	25.30	I	C	SP	P
CAN	75.669	172.72	5.63	25.08	I	C	SP	P
VRI	75.720	318.66	5.63	25.07	I	D	SP	P
TLB	75.929	317.04	5.62	25.00	I	D	SP	P
NWAO	75.937	199.91	5.62	25.00	I	C	SP	P
NWAO	75.937	199.91	5.62	25.00	I	C	LP	P
KRA	75.940	325.04	5.61	25.00	I	D	SP	P
ISR	76.318	318.20	5.59	24.89	I	D	SP	P
SPC	76.441	324.28	5.58	24.85	I	D	SP	P
ANTO	76.486	311.00	5.58	24.84	I	D	LP	P
WAM	76.522	172.92	5.58	24.83	I	C	SP	P
JOS	76.817	323.65	5.56	24.75	I	D	SP	P
KSP	76.903	327.37	5.56	24.72	I	D	SP	P
RKG	77.079	199.73	5.55	24.67	I	C	SP	P
BUC1	77.133	317.88	5.54	24.65	I	D	SP	P
HAM	77.301	332.19	5.53	24.58	I	D	SP	P
RSON	77.651	31.69	5.50	24.46	I	D	LP	P

Table 95. Station data for event 138 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BRG	77.831	328.56	5.49	24.42	I	D	SP	P
CLL	77.863	329.31	5.49	24.42	I	D	SP	P
RSSD	77.940	41.62	5.49	24.39	I	D	LP	P
YLV	77.956	313.34	5.49	24.39	I	D	SP	P
CTT	78.079	314.27	5.48	24.35	I	D	SP	P
BUD	78.251	323.72	5.46	24.27	I	D	SP	P
PRU	78.278	327.68	5.46	24.26	I	D	SP	P
SRO	78.324	324.31	5.46	24.24	I	D	SP	P
PVL	78.419	317.46	5.45	24.21	I	D	SP	P
KCT	78.738	313.65	5.43	24.11	I	D	SP	P
VKA	78.858	325.64	5.42	24.09	I	D	SP	P
MOX	78.926	329.60	5.42	24.07	I	D	SP	P
EDC	78.943	313.98	5.42	24.06	I	D	SP	P
EBH	79.061	340.41	5.41	24.02	I	D	SP	P
HOF	79.089	329.26	5.41	24.00	I	D	SP	P
ESY	79.122	339.80	5.40	23.99	I	D	SP	P
EAB	79.326	340.81	5.38	23.86	I	D	SP	P
KHC	79.340	327.63	5.37	23.85	I	D	SP	P
KDZ	79.391	316.28	5.37	23.83	I	D	SP	P
EAU	79.407	340.20	5.37	23.82	I	D	SP	P
WTS	79.599	332.89	5.35	23.72	I	D	SP	P
WET	79.613	328.01	5.34	23.71	I	D	SP	P
ESK	79.812	339.82	5.32	23.61	E	C	LP	P
VTS	79.823	318.13	5.32	23.61	I	D	SP	P
GRF	79.840	329.22	5.32	23.60	I	D	SP	P
GRFO	79.843	329.22	5.32	23.60	I	D	LP	P
KMR	79.950	326.66	5.31	23.55	I	D	LP	P
DBN	80.071	333.81	5.30	23.49	E	D	LP	P
MMB	80.279	317.13	5.28	23.41	I	D	SP	P
IZM	80.634	312.90	5.25	23.27	I	D	SP	P
BHG	80.737	327.12	5.24	23.22	I	D	SP	P
ENN	80.930	332.66	5.22	23.13	I	D	SP	P
FUR	81.039	328.26	5.21	23.08	I	D	SP	P
KBA	81.048	326.46	5.21	23.08	I	D	SP	P
VAY	81.073	317.58	5.21	23.07	I	D	SP	P
SKO	81.174	318.66	5.20	23.03	I	D	SP	P
LHC	81.348	30.89	5.18	22.96	I	D	SP	P
STU	81.369	329.75	5.18	22.95	I	D	LP	P
UCC	81.445	333.52	5.18	22.93	E	D	LP	P
CEY	81.631	325.03	5.16	22.87	I	D	SP	P
GWF	81.798	330.73	5.15	22.82	I	D	SP	P
TRI	81.944	325.37	5.15	22.78	I	D	SP	P
DOU	81.957	333.01	5.15	22.78	E	D	LP	P
KZN	82.228	317.33	5.13	22.70	I	D	SP	P
CDF	82.394	330.60	5.12	22.66	I	D	SP	P
CTI	82.578	326.76	5.11	22.61	I	D	SP	P
ATH	82.896	314.61	5.09	22.52	I	D	SP	P
ETA	82.951	340.25	5.09	22.50	I	D	SP	P
BSF	83.057	330.54	5.08	22.47	I	D	SP	P
HAU	83.079	330.89	5.08	22.47	I	D	SP	P

Table 95. Station data for event 138 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
ALQ	83.107	49.53	5.08	22.46	I	D	SP P
ANMO	83.105	49.53	5.08	22.46	I	D	LP P
ECB	83.398	340.43	5.06	22.38	I	D	SP P
SAL	83.400	327.13	5.06	22.37	I	D	SP P
ECP	83.461	340.12	5.05	22.36	I	D	SP P
BRT	84.099	320.34	5.02	22.18	I	D	SP P
HLW	84.111	304.34	5.02	22.18	I	D	SP P
VLS	84.419	316.58	5.00	22.09	I	D	SP P
LOR	84.610	331.91	4.98	22.03	I	D	SP P
AQU	84.745	323.50	4.98	21.99	I	D	SP P
LBF	84.809	331.69	4.98	21.99	I	D	SP P
DUI	84.803	322.45	4.98	21.99	I	D	SP P
FLN	84.800	335.19	4.98	21.99	I	D	SP P
LDF	84.831	334.90	4.97	21.98	I	D	SP P
SSF	84.913	332.00	4.97	21.96	I	D	SP P
ORI	85.103	320.25	4.95	21.88	I	D	SP P
SMF	85.146	331.59	4.95	21.86	I	D	SP P
AVF	85.199	331.95	4.94	21.83	I	D	SP P
GRR	85.249	335.23	4.94	21.81	I	D	SP P
RMP	85.493	323.58	4.91	21.66	I	D	SP P
BGF	85.579	332.13	4.90	21.63	I	D	SP P
LPF	85.620	335.17	4.89	21.61	I	D	SP P
PLDF	85.801	331.36	4.88	21.54	I	D	SP P
MZF	85.966	332.11	4.86	21.48	I	D	SP P
TCF	86.037	332.37	4.86	21.45	I	D	SP P
PYM	86.211	331.61	4.85	21.40	I	D	SP P
LSF	86.310	332.76	4.84	21.37	I	D	SP P
MFF	86.579	333.94	4.83	21.30	I	D	SP P
FRF	86.665	328.24	4.82	21.27	I	D	SP P
LRG	86.868	328.36	4.81	21.22	I	D	SP P
LMR	86.909	328.20	4.81	21.21	I	D	SP P
SNZO	87.017	154.81	4.80	21.18	I	D	LP P
RJF	87.131	332.29	4.79	21.15	I	D	SP P
CAF	87.261	331.76	4.79	21.11	I	D	SP P
OCO	87.675	43.72	4.76	21.01	I	D	SP P
LFF	87.722	332.58	4.76	21.00	I	D	SP P
LPO	87.786	332.18	4.76	20.99	I	D	SP P
TUL	88.258	42.42	4.74	20.90	I	D	LP P
GAC	88.561	24.24	4.73	20.84	I	D	LP P
MNT	89.311	23.15	4.71	20.77	I	D	SP P
EPF	89.524	331.89	4.71	20.76	I	D	SP P
RSNY	89.893	24.14	4.70	20.72	I	D	LP P
BHO	89.920	42.80	4.70	20.72	I	D	SP P
SCP	92.111	28.04	4.66	20.52	I	D	LP P
TOL	93.849	333.33	4.61	20.28	I	D	LP P
PTO	94.172	337.02	4.59	20.23	E	D	LP P
BNG	110.640	295.13	1.89	8.18	I	D	SP PKP
MTD	114.877	268.69	1.88	8.14	I	D	SP PKP
SJG	116.859	28.42	1.88	8.12	E	D	LP PKP
BUL	119.130	267.54	1.87	8.11	E	D	LP PKP

Table 95. Station data for event 138 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BUL	119.130	267.54	1.87	8.11	I	D	SP	PKP
BLF	125.864	260.11	1.86	8.06	I	D	SP	PKP
GRM	127.625	255.35	1.86	8.04	I	D	SP	PKP
LPB	145.800	54.41	1.66	7.19	I	D	LP	PKP
LNV	153.977	86.05	1.42	6.14	I	D	SP	PKP
PEL	154.197	83.79	1.41	6.11	I	D	SP	PKP
RDJ	162.376	10.98	1.04	4.51	I	D	SP	PKP
LPA	164.538	75.40	0.93	4.01	E	D	LP	PKP

Table 96. Station data for event 151.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
URA	0.874	38.82	12.25	118.88	I	C	SP	P
HAK	1.019	289.56	12.75	114.30	I	D	SP	P
HAC	1.030	202.47	12.78	114.00	I	C	SP	P
AOM	1.159	235.59	13.08	110.82	I	D	SP	P
MRR	1.152	316.96	13.06	110.98	I	D	SP	P
SAP	1.664	341.74	13.66	102.52	I	D	SP	P
MAT	5.763	212.43	13.93	84.51	I	C	SP	P
SHK	10.129	229.81	13.53	75.28	I	C	SP	P
SEO	12.280	256.38	13.26	71.38	E	C	LP	P
SNY	13.817	277.57	13.01	68.48	I	C	SP	P
BJI	19.631	274.38	10.42	48.16	I	C	LP	P
SSE	19.703	244.95	10.40	48.02	E	C	LP	P
NJ2	20.773	250.53	10.14	46.47	I	C	SP	P
ANP	23.535	232.71	9.62	43.45	E	C	LP	P
BTO	24.105	278.60	9.54	43.00	I	C	SP	P
QZH	25.509	237.03	9.39	42.17	I	C	SP	P
XAN	27.100	264.93	9.24	41.35	I	C	SP	P
GZH	30.208	241.51	8.86	39.28	I	C	SP	P
GTA	31.978	280.51	8.73	38.63	I	C	SP	P
CD2	32.414	263.46	8.70	38.45	I	C	SP	P
KMI	36.326	255.77	8.46	37.21	E	C	LP	P
WMQ	39.443	292.20	8.28	36.32	I	C	SP	P
CHG	43.012	251.58	8.09	35.34	I	C	SP	P
CHTO	43.012	251.58	8.09	35.34	I	C	LP	P
BDT	44.010	249.84	8.03	35.04	I	C	SP	P
NST	44.291	247.14	8.02	34.98	I	C	SP	P
COL	45.129	34.49	7.97	34.75	I	C	SP	P
COL	45.129	34.49	7.97	34.75	E	N	LP	P
INK	50.241	28.78	7.62	33.01	I	C	SP	P
MBC	52.142	17.44	7.47	32.28	I	C	SP	P
HON	53.890	92.59	7.33	31.60	E	C	LP	P
PSI	54.639	236.85	7.27	31.31	I	C	SP	P
KBS	56.385	349.76	7.14	30.69	I	C	LP	P
HYB	58.903	266.14	6.95	29.79	I	C	SP	P
KEV	59.483	338.52	6.90	29.57	I	C	LP	P
RSNT	59.765	31.54	6.88	29.46	I	C	LP	P
CTAO	61.368	175.49	6.75	28.86	E	D	LP	P
CTA	61.368	175.49	6.75	28.86	I	C	SP	P
POO	61.753	270.31	6.72	28.72	I	C	SP	P
MHI	62.123	295.01	6.69	28.58	I	C	SP	P
KHI	63.885	293.42	6.55	27.92	I	C	LP	P
ASPA	65.243	188.22	6.44	27.42	I	C	SP	P
MBL	65.629	202.79	6.41	27.28	I	C	SP	P
NOU	67.374	155.51	6.26	26.59	I	C	SP	P
CLX	67.739	44.82	6.23	26.46	I	C	SP	P
IR2	68.243	298.76	6.19	26.27	I	C	SP	P
NAU	68.282	206.40	6.19	26.26	I	C	SP	P
GDH	68.996	5.88	6.13	26.00	I	C	LP	P
UPP	69.195	333.55	6.12	25.92	I	C	SP	P
FFC	69.732	33.78	6.07	25.73	I	C	SP	P

Table 96. Station data for event 151 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
TAB	69.758	303.16	6.07	25.71	I	C	LP	P
JAS1	70.984	56.02	5.98	25.32	I	C	SP	P
HYA	71.603	339.15	5.93	25.10	I	C	SP	P
SUE	72.071	339.70	5.91	24.97	I	C	SP	P
ODD	72.489	338.24	5.87	24.82	I	C	SP	P
STK	72.988	180.40	5.84	24.68	I	C	SP	P
KMY	73.504	338.45	5.80	24.50	I	C	LP	P
COP	74.195	333.03	5.76	24.30	I	C	LP	P
MRWA	74.345	203.49	5.74	24.23	I	C	SP	P
CLI	74.919	319.52	5.71	24.07	I	C	SP	P
CFR	75.452	318.08	5.67	23.93	I	C	SP	P
VRI	75.675	319.31	5.66	23.86	I	C	SP	P
KRA	75.703	325.70	5.66	23.85	I	C	SP	P
TLB	75.933	317.71	5.64	23.76	I	C	SP	P
RSON	75.984	32.68	5.63	23.74	I	C	LP	P
RSSD	76.219	42.68	5.62	23.67	E	C	LP	P
SPC	76.227	324.96	5.62	23.67	I	C	SP	P
ISR	76.287	318.88	5.61	23.66	I	C	SP	P
BRL	76.461	330.61	5.60	23.61	I	C	SP	P
BRN	76.535	330.62	5.60	23.59	I	C	SP	P
KSP	76.596	328.06	5.60	23.58	I	C	SP	P
JOS	76.622	324.34	5.59	23.57	I	C	SP	P
HAM	76.852	332.90	5.58	23.51	I	C	SP	P
BUC	77.029	318.60	5.57	23.46	I	C	SP	P
PSZ	77.340	324.28	5.55	23.38	I	C	SP	P
NWAO	77.478	201.19	5.54	23.34	E	C	LP	P
CLL	77.498	330.04	5.54	23.34	I	C	SP	P
PRU	77.962	328.42	5.51	23.21	I	C	SP	P
YLV	78.071	314.07	5.51	23.18	I	C	SP	P
SRO	78.108	325.05	5.50	23.16	I	C	SP	P
CLO	78.147	320.82	5.50	23.15	I	C	SP	P
PVL	78.409	318.20	5.48	23.05	I	C	SP	P
WIT	78.485	334.20	5.47	23.03	I	C	SP	P
MOX	78.553	330.36	5.47	23.01	I	C	SP	P
VKA	78.602	326.40	5.46	22.99	I	C	SP	P
SOP	78.957	325.90	5.44	22.90	I	C	SP	P
KHC	79.025	328.40	5.44	22.88	I	C	SP	P
EDC	79.037	314.75	5.44	22.88	I	C	SP	P
WTS	79.129	333.68	5.43	22.85	I	C	SP	P
DST	79.155	313.79	5.43	22.84	I	C	SP	P
WET	79.287	328.79	5.42	22.80	I	C	SP	P
KDZ	79.417	317.05	5.41	22.75	I	C	SP	P
GRF	79.478	330.01	5.40	22.72	I	C	SP	P
GRFO	79.480	330.01	5.40	22.72	I	C	LP	P
VTS	79.792	318.91	5.37	22.55	I	C	SP	P
EZN	80.230	315.24	5.32	22.34	I	C	SP	P
MMB	80.279	317.93	5.31	22.32	I	C	SP	P
BHG	80.436	327.93	5.30	22.25	I	C	SP	P
ENN	80.466	333.49	5.29	22.24	I	C	SP	P
JER	80.783	304.32	5.27	22.13	I	C	SP	P

Table 96. Station data for event 151 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
STU	80.990	330.58	5.25	22.05	I	C	SP P
VAY	81.058	318.40	5.25	22.02	I	C	SP P
SKO	81.127	319.48	5.24	21.99	I	C	SP P
DMU	81.330	342.01	5.22	21.89	I	C	SP P
GWF	81.390	331.58	5.21	21.87	I	C	SP P
DOU	81.482	333.87	5.20	21.83	E	C	LP P
DLE	81.807	341.57	5.18	21.71	I	C	SP P
OGA	81.865	328.47	5.17	21.69	I	C	SP P
DCN	81.927	342.00	5.17	21.67	I	C	SP P
CDF	81.990	331.46	5.16	21.65	I	C	SP P
ETA	82.270	341.14	5.14	21.57	I	C	SP P
CTI	82.287	327.63	5.14	21.57	I	C	SP P
BSF	82.654	331.42	5.12	21.48	I	C	SP P
HAU	82.666	331.77	5.12	21.48	I	C	SP P
ECB	82.712	341.33	5.12	21.47	I	C	SP P
ECP	82.783	341.03	5.12	21.48	I	C	SP P
ORO	84.075	329.53	5.04	21.10	I	C	SP P
TAU	84.130	176.10	5.03	21.09	E	C	LP P
LOR	84.167	332.84	5.03	21.08	I	C	SP P
FLN	84.261	336.13	5.03	21.05	I	C	SP P
LDF	84.301	335.84	5.02	21.04	I	C	SP P
LBF	84.371	332.63	5.02	21.02	I	C	SP P
GRC	84.410	333.32	5.02	21.01	I	C	SP P
SSF	84.466	332.95	5.01	21.00	I	C	SP P
HLW	84.491	305.27	5.01	20.99	I	C	SP P
GRR	84.708	336.18	5.00	20.94	I	C	SP P
SMF	84.711	332.54	5.00	20.93	I	C	SP P
AVF	84.754	332.90	5.00	20.92	I	C	SP P
MNS	84.838	324.89	4.99	20.90	I	C	SP P
LPF	85.082	336.13	4.98	20.84	I	C	SP P
BGF	85.129	333.09	4.97	20.83	I	C	SP P
PLDF	85.372	332.33	4.96	20.78	I	C	SP P
MZF	85.516	333.08	4.95	20.72	I	C	SP P
TCF	85.580	333.34	4.94	20.70	I	C	SP P
PYM	85.776	332.59	4.92	20.57	I	C	SP P
LSF	85.841	333.74	4.91	20.54	I	C	SP P
MFF	86.075	334.93	4.88	20.43	I	C	SP P
FRF	86.328	329.23	4.86	20.34	I	C	SP P
LRG	86.528	329.35	4.85	20.28	I	C	SP P
RJF	86.675	333.29	4.84	20.24	I	C	SP P
CAF	86.821	332.77	4.83	20.20	I	C	SP P
GAC	86.966	25.31	4.82	20.17	I	C	LP P
LFF	87.257	333.60	4.80	20.08	I	C	SP P
LPO	87.333	333.20	4.80	20.07	I	C	SP P
SNZO	87.548	155.99	4.79	20.02	E	N	LP P
RSNY	88.300	25.23	4.75	19.86	I	C	LP P
EPF	89.079	332.97	4.72	19.71	I	C	SP P
ARO	89.239	284.63	4.71	19.69	I	C	LP P
SCP	90.476	29.15	4.70	19.63	I	C	LP P
TOL	93.360	334.53	4.63	19.35	I	C	SP P

Table 97. Station data for event 166.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
TAJ	1.521	287.86	14.27	123.11	I	C	SP P
MYZ	1.958	326.98	14.26	56.82	I	C	SP P
KAG	2.239	305.81	14.26	123.18	I	C	SP P
FKK	3.831	329.89	14.21	123.48	I	C	SP P
SHK	4.244	359.96	14.19	56.40	I	D	SP P
SEO	8.682	328.39	13.87	54.50	E	C	LP P
ANP	11.113	245.54	13.58	52.85	E	C	LP P
SZP	16.874	224.11	12.59	47.64	I	C	SP P
GUA	20.124	143.21	10.45	37.83	E	C	LP P
CGP	22.958	200.63	9.77	34.99	I	D	SP P
CHTO	32.624	257.38	8.72	30.79	I	C	LP P
RAB	39.014	148.09	8.32	29.23	E	C	LP P
KNA	45.906	185.25	7.94	27.78	I	D	SP P
NDI	47.901	282.70	7.82	27.32	I	D	SP P
WB2	49.948	177.95	7.66	26.72	I	D	SP P
CTA	51.742	163.68	7.54	26.27	I	D	SP P
CTAO	51.742	163.68	7.54	26.27	E	N	LP P
ASPA	53.639	178.61	7.38	25.67	I	D	SP P
NAU	55.043	199.46	7.26	25.22	I	D	SP P
QUE	56.027	287.85	7.18	24.92	I	D	SP P
WBN	56.392	186.59	7.15	24.81	I	D	SP P
MHI	60.148	296.92	6.88	23.82	I	D	LP P
BRS	60.468	159.45	6.84	23.67	I	D	SP P
INK	63.622	24.47	6.60	22.79	I	D	SP P
KEV	67.119	338.66	6.31	21.74	E	D	LP P
NUR	72.341	330.41	5.89	20.23	E	D	LP P
TAU	74.050	168.86	5.78	19.83	I	D	SP P
ANTO	78.119	309.21	5.52	18.90	I	D	LP P
COR	78.397	45.06	5.49	18.80	I	C	SP P
VRI	78.894	316.79	5.45	18.66	I	C	SP P
KONO	78.917	334.30	5.45	18.66	I	D	LP P
EDM	79.083	34.03	5.45	18.66	I	D	SP P
JER	80.398	301.07	5.31	18.16	I	D	SP P
COP	80.415	330.25	5.31	18.16	E	D	LP P
GDH	80.672	2.24	5.31	18.16	E	D	LP P
SPC	80.685	322.08	5.31	18.16	I	D	SP P
JOS	80.934	321.39	5.26	17.98	I	D	SP P
WDC	80.974	48.22	5.26	17.98	I	D	SP P
SNZO	81.120	149.30	5.26	17.98	E	D	LP P
GZR	81.470	317.93	5.22	17.84	I	D	SP P
KSP	81.717	324.97	5.22	17.84	I	D	SP P
KDZ	82.021	313.73	5.18	17.70	I	D	SP P
PLD	82.166	314.39	5.18	17.70	I	D	SP P
YER	82.557	308.68	5.14	17.56	I	D	SP P
ZST	82.946	322.54	5.12	17.49	I	D	SP P
HAM	82.985	329.56	5.12	17.49	I	D	SP P
CLL	83.018	326.67	5.12	17.49	I	D	SP P
PRU	83.127	325.01	5.12	17.49	I	D	SP P
FFC	83.211	28.46	5.12	17.49	I	D	SP P
VKA	83.314	322.93	5.08	17.35	I	D	SP P

Table 97. Station data for event 166 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
VAY	83.926	314.66	5.05	17.24	I	D	SP P
MOX	84.116	326.75	5.05	17.24	I	D	SP P
KHC	84.160	324.76	5.05	17.24	I	D	SP P
HOF	84.213	326.39	5.05	17.24	I	D	SP P
SKO	84.237	315.68	5.05	17.24	I	L	SP P
WET	84.498	325.07	5.02	17.14	I	D	SP P
GRF	84.944	326.21	4.99	17.03	I	D	SP P
MNA	84.985	48.14	4.99	17.03	I	D	SP P
EDU	85.717	337.17	4.96	16.93	I	D	SP P
BNS	85.942	328.93	4.91	16.75	I	D	SP P
TRI	86.292	322.07	4.86	16.57	I	D	SP P
EBL	86.345	336.71	4.86	16.57	I	D	SP P
STB	86.354	328.82	4.86	16.57	I	D	SP P
EAB	86.447	337.55	4.86	16.57	I	D	SP P
CDF	87.706	327.07	4.80	16.36	I	D	SP P
BSF	88.346	326.90	4.75	16.19	I	D	SP P
RSON	89.446	27.32	4.71	16.05	E	D	LP P
RSSD	89.657	37.02	4.71	16.05	E	D	LP P
LPG	90.032	325.28	4.71	16.05	I	D	SP P
LOR	90.122	327.95	4.71	16.05	I	D	SP P
SSF	90.438	327.99	4.70	16.01	I	D	SP P
GRC	90.461	328.37	4.70	16.01	I	D	SP P
AVF	90.709	327.89	4.70	16.01	I	D	SP P
LSF	91.947	328.48	4.67	15.91	I	D	SP P
MFF	92.423	329.59	4.66	15.87	I	D	SP P
CAF	92.702	327.32	4.66	15.87	I	D	SP P
TOL	99.465	327.67	4.47	15.21	E	D	LP P
BNG	108.310	286.58	1.89	6.37	I	D	SP PKP

Table 98. Station data for event 182.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ISN	0.751	330.57	13.49	107.39	I	D	SP	P
SEN	0.845	305.56	13.49	107.39	I	D	SP	P
FKS	1.029	269.60	13.82	102.14	I	D	SP	P
ONA	1.075	220.20	13.91	100.26	I	D	SP	P
YAM	1.223	293.62	13.97	98.79	I	D	SP	P
OFU	1.289	358.11	14.02	97.34	I	D	SP	P
MIY	1.877	4.61	14.13	91.66	I	D	SP	P
MRK	1.980	346.37	14.13	91.66	I	D	SP	P
TSK	2.049	221.04	14.13	91.66	I	D	SP	P
NII	2.159	274.51	14.14	90.00	I	D	SP	P
AKI	2.343	326.61	14.15	90.00	I	D	SP	P
HIK	5.101	242.42	14.07	84.46	I	C	SP	P
SEO	11.740	273.53	13.44	71.95	I	C	LP	P
SSE	18.224	254.70	12.32	60.64	I	C	LP	P
BJI	20.033	284.45	10.39	47.31	I	C	LP	P
ANP	21.298	239.73	10.02	45.14	I	C	LP	P
GUA	24.293	172.56	9.52	42.33	I	D	LP	P
PIP	26.791	229.51	9.27	40.98	I	C	SP	P
BAG	28.309	227.03	9.09	40.02	I	C	LP	P
MAN	29.436	224.10	8.95	39.28	I	C	SP	P
LZH	30.235	278.57	8.89	38.97	I	C	SP	P
DAV	33.896	209.76	8.61	37.52	E	C	LP	P
KMI	35.361	260.56	8.52	37.06	I	C	LP	P
CHG	41.754	255.24	8.15	35.21	I	C	SP	P
CHTO	41.754	255.24	8.15	35.21	I	C	LP	P
SLKI	46.548	194.36	7.90	33.98	I	D	SP	P
MKS	47.535	210.82	7.84	33.68	I	C	SP	P
COL	48.332	32.55	7.77	33.34	I	C	LP	P
COL	48.332	32.55	7.77	33.34	I	C	SP	P
KGM	50.093	234.12	7.65	32.76	I	C	SP	P
PSI	52.492	238.91	7.45	31.80	I	C	SP	P
INK	53.607	27.39	7.37	31.42	I	C	SP	P
NDI	53.819	280.58	7.33	31.23	I	C	SP	P
HON	54.024	89.72	7.33	31.23	I	D	LP	P
MBC	55.744	16.63	7.21	30.67	I	C	SP	P
CTAO	57.695	175.02	7.06	29.96	E	D	LP	P
WRA	57.822	188.27	7.03	29.82	I	C	SP	P
ALE	59.365	3.58	6.91	29.26	I	C	SP	P
QUE	61.005	287.17	6.79	28.71	I	C	LP	P
ASPA	61.549	188.21	6.75	28.52	I	C	SP	P
POO	61.624	272.14	6.75	28.52	I	C	SP	P
BOM	62.244	273.09	6.71	28.34	I	C	SP	P
KEV	62.862	339.19	6.63	27.97	I	C	LP	P
KEV	62.862	339.19	6.63	27.97	I	C	LP	P
RSNT	63.047	30.43	6.63	27.97	I	C	LP	P
WBN	65.146	195.05	6.47	27.24	I	C	SP	P
LON	67.552	47.68	6.26	26.29	E	C	LP	P
COR	67.790	50.27	6.22	26.10	I	C	SP	P
EDM	68.599	38.63	6.18	25.92	I	C	SP	P
NUR	69.442	331.94	6.10	25.56	I	C	LP	P

Table 98. Station data for event 182 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SES	71.417	40.18	5.95	24.89	I	C	SP	P
ADE	72.417	182.64	5.88	24.58	I	C	SP	P
UPP	72.425	334.01	5.88	24.58	I	C	SP	P
GDH	72.702	5.66	5.88	24.58	I	C	LP	P
FFC	72.939	32.98	5.85	24.45	I	C	SP	P
JAS	73.232	54.90	5.85	24.45	E	C	LP	P
NWAO	73.951	201.31	5.78	24.13	E	C	LP	P
KONO	75.220	337.09	5.71	23.82	I	C	LP	P
COP	77.406	333.33	5.55	23.12	I	C	SP	P
COP	77.406	333.33	5.55	23.12	I	C	LP	P
MUD	77.912	335.30	5.51	22.94	I	C	SP	P
CFR	78.079	318.52	5.51	22.94	I	C	SP	P
ISR	78.949	319.27	5.44	22.63	I	C	SP	P
ANTO	78.991	312.14	5.44	22.63	E	C	LP	P
MLR	79.016	319.83	5.44	22.63	I	C	SP	P
PSN	79.072	317.37	5.44	22.63	I	C	SP	P
RSSD	79.097	42.00	5.44	22.63	I	C	LP	P
SPC	79.146	325.29	5.44	22.63	I	C	SP	P
RSON	79.222	32.11	5.44	22.63	I	C	LP	P
JOS	79.515	324.66	5.41	22.50	I	C	SP	P
KSP	79.634	328.34	5.41	22.50	I	C	SP	P
BRN	79.665	330.87	5.41	22.50	I	C	SP	P
BUC1	79.758	318.95	5.35	22.24	I	C	SP	P
COZ	79.947	320.50	5.35	22.24	I	C	SP	P
TAU	80.451	175.87	5.30	22.02	E	D	LP	P
CLL	80.607	330.26	5.30	22.02	I	C	SP	P
JMB	80.758	317.28	5.25	21.80	I	C	SP	P
BUD	80.951	324.71	5.25	21.80	I	C	SP	P
PRU	81.012	328.64	5.25	21.80	I	C	SP	P
SRO	81.029	325.30	5.25	21.80	I	C	SP	P
ZST	81.283	326.17	5.21	21.63	I	C	SP	P
VIE	81.569	326.58	5.21	21.63	I	C	LP	P
VKA	81.575	326.61	5.21	21.63	I	C	SP	P
MOX	81.672	330.54	5.21	21.63	I	C	SP	P
EBH	81.817	341.26	5.17	21.45	I	C	SP	P
HOF	81.832	330.20	5.17	21.45	I	C	SP	P
ESY	81.880	340.66	5.17	21.45	I	C	SP	P
SOP	81.911	326.11	5.17	21.45	I	C	SP	P
KDZ	81.992	317.32	5.17	21.45	I	C	SP	P
KHC	82.073	328.58	5.17	21.45	I	C	SP	P
EAB	82.080	341.65	5.17	21.45	I	C	SP	P
WET	82.349	328.95	5.14	21.32	I	C	SP	P
VTS	82.452	319.14	5.14	21.32	I	C	SP	P
GRFO	82.586	330.16	5.14	21.32	I	C	LP	P
KMR	82.676	327.61	5.14	21.32	I	C	LP	P
DBN	82.832	334.71	5.11	21.19	I	C	LP	P
MMB	82.893	318.15	5.11	21.19	I	C	SP	P
LHC	82.948	31.47	5.11	21.19	I	C	SP	P
BNS	83.079	333.02	5.11	21.19	I	C	SP	P
BHG	83.466	328.06	5.08	21.06	I	C	SP	P

Table 98. Station data for event 182 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
STB	83.504	332.99	5.08	21.06	I	C	SP P
BGG	83.645	332.50	5.08	21.06	I	C	SP P
KLL	83.651	333.30	5.08	21.06	I	C	SP P
ENN	83.688	333.57	5.08	21.06	I	C	SP P
KBA	83.772	327.41	5.05	20.93	I	C	SP P
FUR	83.776	329.19	5.05	20.93	I	C	SP P
MEM	83.790	333.44	5.05	20.93	I	C	SP P
SKO	83.811	319.65	5.05	20.93	I	C	SP P
ANMO	83.902	50.11	5.05	20.93	I	C	LP P
STU	84.115	330.67	5.05	20.93	I	C	LP P
UCC	84.205	334.43	5.05	20.93	E	C	LP P
SNZO	84.254	155.69	5.02	20.80	E	D	LP P
GAP	84.411	328.89	5.02	20.80	I	C	SP P
BUH	84.566	331.14	5.02	20.80	I	C	SP P
TRI	84.659	326.32	5.02	20.80	I	C	SP P
DOU	84.716	333.92	5.02	20.80	E	C	LP P
OGA	84.913	328.54	4.99	20.67	I	C	SP P
CDF	85.145	331.51	4.99	20.67	I	C	SP P
ATH	85.468	315.60	4.96	20.54	I	C	SP P
BSF	85.807	331.45	4.90	20.28	I	C	SP P
HAU	85.830	331.80	4.90	20.28	I	C	SP P
ECB	86.153	341.30	4.90	20.28	I	C	SP P
ECP	86.217	340.99	4.90	20.28	I	C	SP P
HLW	86.462	305.35	4.86	20.11	I	C	SP P
LOR	87.366	332.81	4.80	19.85	I	C	SP P
LBF	87.563	332.59	4.80	19.85	I	C	SP P
FLN	87.563	336.08	4.80	19.85	I	C	SP P
LDF	87.594	335.79	4.80	19.85	I	C	SP P
SSF	87.669	332.90	4.80	19.85	I	C	SP P
LPG	87.755	330.16	4.77	19.72	I	C	SP P
SMF	87.900	332.49	4.77	19.72	I	C	SP P
AVF	87.955	332.85	4.77	19.72	I	C	SP P
GRR	88.011	336.12	4.77	19.72	I	C	SP P
BGF	88.336	333.02	4.75	19.63	I	C	SP P
LPF	88.383	336.05	4.75	19.63	I	C	SP P
MZF	88.723	333.00	4.75	19.63	I	C	SP P
TCF	88.794	333.26	4.73	19.55	I	C	SP P
LSF	89.068	333.65	4.73	19.55	I	C	SP P
CVF	89.289	327.23	4.71	19.46	I	C	SP P
MFF	89.340	334.83	4.71	19.46	I	C	SP P
FRF	89.402	329.14	4.71	19.46	I	C	SP P
LRG	89.606	329.25	4.71	19.46	I	C	SP P
LMR	89.646	329.09	4.71	19.46	I	C	SP P
RJF	89.888	333.18	4.71	19.46	I	C	SP P
CAF	90.016	332.65	4.71	19.46	I	C	SP P
GAC	90.406	25.10	4.70	19.42	I	C	LP P
LFF	90.480	333.47	4.70	19.42	I	C	SP P
LPO	90.543	333.06	4.70	19.42	I	C	SP P
MNT	91.195	24.05	4.69	19.38	I	C	SP P
RSNY	91.741	25.06	4.68	19.33	I	C	LP P

Table 95. Station data for event 182 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
EPF	92.280	332.77	4.66	19.25	I	C	SP P
LGR	93.786	334.34	4.61	19.03	I	C	SP P
SCP	93.814	29.04	4.61	19.03	I	C	LP P
WES	94.725	23.95	4.59	18.95	I	C	LP P
RSCP	94.826	36.99	4.58	18.90	E	C	LP P
TOL	96.609	334.20	4.54	18.73	I	C	LP P
TOL	96.609	334.20	4.54	18.73	I	C	SP P
PTO	96.935	337.91	4.53	18.69	E	C	LP P
SHA	97.463	41.66	4.52	18.65	I	C	LP P
NAL	102.599	278.25	4.45	18.35	I	C	LP Pdf
SJG	118.527	30.46	1.88	7.62	I	C	LP PKP
UPA	119.574	48.57	1.87	7.61	E	C	LP PKP
BUL	120.106	266.96	1.87	7.61	I	C	SP PKP
JOZ	121.126	257.82	1.87	7.61	I	C	SP PKP
SLR	123.248	261.55	1.87	7.60	I	C	SP PKP
BOG	126.270	46.38	1.86	7.58	I	C	LP PKP
LPB	146.265	59.34	1.66	6.76	I	C	LP PKP
LPA	163.866	85.77	0.96	3.91	E	C	LP PKP
RDJ	164.564	17.56	0.91	3.69	I	C	LP PKP

Table 99. Station data for event 198.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
TOK	0.349	246.79	6.94	150.18	I	C	SP P
TSK	0.387	354.93	7.51	147.43	I	C	SP P
YOK	0.560	226.40	9.64	136.27	I	C	SP P
MIT	0.610	25.03	10.12	133.53	I	C	SP P
KYS	0.626	180.28	10.26	132.67	I	D	SP P
SRY	0.746	253.42	11.16	126.89	I	C	SP P
UTS	0.752	342.52	11.19	126.69	I	C	SP P
OYM	0.844	241.65	11.71	122.93	I	C	SP P
TAT	0.871	195.51	11.84	121.92	I	C	SP P
AJI	1.162	228.16	12.81	113.34	I	C	SP P
MIS	1.225	234.85	12.94	111.91	I	C	SP P
OSH	1.235	211.04	12.96	111.69	I	C	SP P
ONA	1.273	28.36	13.03	110.89	I	C	SP P
KOF	1.306	263.44	13.09	110.21	I	C	SP P
SHZ	1.660	239.72	13.50	104.63	I	C	SP P
SEN	2.503	13.61	13.84	97.14	I	C	SP P
MIY	4.076	20.14	13.95	91.68	I	C	SP P
HAC	4.816	12.58	13.93	86.60	I	C	SP P
SHK	6.256	260.27	13.87	83.65	I	D	LP P
SEO	10.731	283.21	13.43	74.35	E	D	LP P
CN2	13.814	309.67	12.99	68.63	I	D	SP P
DL2	15.049	287.30	12.78	66.40	I	D	SP P
GUA	22.599	167.88	9.76	44.39	E	C	LP P
BTO	24.090	290.51	9.54	43.12	I	D	SP P
PIP	24.542	229.88	9.48	42.82	I	C	SP P
SZP	25.229	228.97	9.41	42.40	I	C	SP P
QIZ	31.506	246.00	8.76	38.89	I	D	SP P
KMI	33.781	262.10	8.61	38.12	E	D	LP P
LOE	38.634	251.87	8.32	36.62	I	D	SP P
CHG	40.012	256.07	8.25	36.24	I	D	LP P
CHG	40.012	256.07	8.25	36.24	I	D	SP P
CHTO	40.012	256.07	8.25	36.24	I	D	LP P
SHIO	42.382	269.87	8.12	35.57	I	D	LP P
MKS	45.202	209.72	7.97	34.82	I	C	SP P
SNG	46.032	241.35	7.92	34.58	I	D	SP P
SNG	46.032	241.35	7.92	34.58	I	D	LP P
TRT	50.448	216.43	7.60	33.02	I	C	SP P
COL	50.669	31.65	7.59	32.94	I	C	LP P
HON	55.374	87.40	7.21	31.11	I	C	LP P
WB3	55.707	186.60	7.18	30.99	I	C	SP P
CTA	55.898	173.07	7.17	30.91	I	C	SP P
HYB	57.155	268.44	7.08	30.48	I	D	SP P
MBL	59.845	202.01	6.87	29.51	I	D	SP P
POO	60.398	272.28	6.83	29.30	I	D	SP P
KOU	60.551	153.90	6.82	29.24	I	C	SP P
DZM	62.725	152.47	6.64	28.43	I	C	SP P
NOU	62.945	152.57	6.62	28.34	I	D	SP P
BRS	63.987	167.51	6.54	27.96	I	C	SP P
BRS	63.987	167.51	6.54	27.96	I	C	SP P
KEV	64.215	339.18	6.52	27.87	E	D	LP P

Table 99. Station data for event 198 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KHI	64.850	295.01	6.47	27.64	E	D	LP	P
RSNT	65.379	29.54	6.43	27.44	E	C	LP	P
AFI	67.157	128.38	6.28	26.74	E	C	LP	P
LON	69.827	46.51	6.06	25.76	E	C	LP	P
ADE	70.432	181.26	6.02	25.58	I	C	SP	P
NWAO	71.674	200.18	5.93	25.14	E	D	LP	P
YKM	72.157	42.28	5.90	25.01	I	D	SP	P
GDH	74.756	5.01	5.71	24.18	I	C	SP	P
FFC	75.276	32.02	5.68	24.04	I	C	SP	P
JAS	75.422	53.70	5.67	24.00	E	C	LP	P
KONO	76.495	336.62	5.60	23.67	I	D	LP	P
SBB	79.016	55.19	5.44	22.94	I	C	LP	P
MUD	79.123	334.74	5.43	22.91	I	D	SP	P
ANTO	79.318	311.62	5.42	22.84	I	D	LP	P
GPA	80.548	313.16	5.28	22.26	I	D	SP	P
ISK	80.789	314.38	5.27	22.18	I	D	SP	P
YLV	80.924	313.83	5.26	22.13	I	C	SP	P
RSON	81.558	31.16	5.19	21.86	E	C	LP	P
PVL	81.618	317.88	5.19	21.84	I	C	SP	P
ZST	82.160	325.52	5.15	21.66	I	C	SP	P
MOX	82.710	329.86	5.12	21.53	I	C	SP	P
HOF	82.858	329.52	5.12	21.52	I	C	SP	P
WIT	82.906	333.65	5.11	21.51	I	C	SP	P
WET	83.329	328.25	5.08	21.36	I	C	SP	P
MMB	83.458	317.45	5.07	21.32	I	D	SP	P
IZM	83.572	313.24	5.06	21.29	I	C	SP	P
GRFO	83.610	329.45	5.06	21.28	E	D	LP	P
YER	83.785	311.75	5.05	21.23	I	D	SP	P
BHG	84.412	327.32	5.01	21.07	I	C	SP	P
STB	84.630	332.24	5.00	21.01	I	C	SP	P
VOY	85.236	325.68	4.96	20.85	I	C	SP	P
TRI	85.539	325.54	4.95	20.76	I	D	SP	P
ANMO	86.151	49.09	4.88	20.45	E	C	LP	P
HLW	86.507	304.53	4.85	20.34	I	D	SP	P
LGR	94.953	333.22	4.57	19.13	I	D	SP	P
WES	97.025	22.94	4.53	18.94	E	C	LP	P

Table 100. Station data for event 205.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
TOY	0.982	165.96	14.28	122.96	I	D	SP P
NGN	1.432	133.84	14.27	123.02	I	D	SP P
MAT	1.524	136.74	14.27	123.02	I	D	SP P
SHK	4.637	228.95	14.17	56.37	I	D	SP P
SHK	4.637	228.95	14.17	56.37	I	C	LP P
SEO	7.895	272.35	13.91	54.82	E	C	LP P
ANP	18.062	230.88	12.38	46.67	I	C	LP P
TIY	19.365	277.67	10.59	38.48	I	C	SP P
KMI	31.560	256.61	8.79	31.10	E	C	LP P
COL	50.494	32.33	7.62	26.60	E	C	LP P
INK	55.462	26.83	7.22	25.10	I	C	SP P
MBC	56.936	16.11	7.11	24.69	I	C	SP P
WR2	57.342	182.85	7.07	24.55	I	C	SP P
POO	57.770	269.27	7.03	24.40	I	C	SP P
RSNT	65.056	29.07	6.47	22.34	E	C	LP P
DZM	65.585	149.86	6.43	22.20	I	C	SP P
NOU	65.802	149.96	6.39	22.05	I	C	SP P
MRWA	69.346	199.48	6.10	21.00	I	C	SP P
UPP	70.779	332.21	5.99	20.61	I	C	SP P
GDH	73.131	3.87	5.85	20.11	E	C	LP P
KONO	73.759	335.12	5.78	19.85	E	C	LP P
ORV	74.778	51.72	5.71	19.60	I	C	SP P
COP	75.709	331.19	5.68	19.50	I	D	SP P
ANTO	76.151	309.75	5.64	19.35	E	C	LP P
MUD	76.333	333.14	5.61	19.25	I	D	SP P
JAS	76.405	52.53	5.61	19.25	E	C	LP P
JAS1	76.428	52.54	5.61	19.25	I	C	SP P
BRG	78.640	327.16	5.48	18.78	I	C	SP P
CLL	78.720	327.91	5.48	18.78	I	C	SP P
SRO	78.857	322.90	5.45	18.68	I	C	SP P
ZST	79.160	323.76	5.45	18.68	I	C	SP P
KDZ	79.396	314.83	5.41	18.54	I	C	SP P
VKA	79.476	324.19	5.41	18.54	I	C	SP P
SOP	79.782	323.66	5.36	18.36	I	C	SP P
MOX	79.799	328.13	5.36	18.36	I	D	SP P
ELL	79.867	308.71	5.36	18.36	I	C	SP P
HOF	79.940	327.78	5.36	18.36	I	C	SP P
VTS	79.948	316.64	5.36	18.36	I	C	SP P
KHC	80.086	326.14	5.36	18.36	I	C	SP P
WIT	80.087	331.94	5.36	18.36	I	D	SP P
MMB	80.338	315.61	5.31	18.18	I	C	SP P
YER	80.618	309.86	5.31	18.18	I	D	SP P
KMR	80.632	325.13	5.31	18.18	I	D	LP P
RSON	81.297	29.71	5.22	17.86	E	C	LP P
BHG	81.446	325.53	5.22	17.86	I	C	SP P
KBA	81.715	324.86	5.22	17.86	I	C	SP P
GSH	81.842	330.80	5.18	17.72	I	C	SP P
LJU	81.929	323.55	5.18	17.72	I	C	SP P
ENN	81.993	331.05	5.18	17.72	I	C	SP P
MEM	82.087	330.91	5.18	17.72	I	D	SP P

Table 100. Station data for event 205 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
					I	C	SP	P
TRI	82.538	323.72	5.14	17.58	I	C	SP	P
UCC	82.561	331.87	5.14	17.58	E	C	LP	P
ECB	84.935	338.62	4.99	17.05	I	C	SP	P
ECP	84.979	338.31	4.99	17.05	I	C	SP	P
ANMO	86.872	47.35	4.83	16.49	E	C	LP	P
CDR	87.728	326.85	4.80	16.38	I	C	SP	P
LPB	149.532	53.11	1.56	5.26	E	C	LP	PKP

Figure 39. Azimuthal equidistant map for geographic subdivision,
Bonin – Mariana – Caroline islands

FIRST MOTION FM LOCATIONS
1984–1985
BONIN–MARIANA–CAROLINE ISLES.

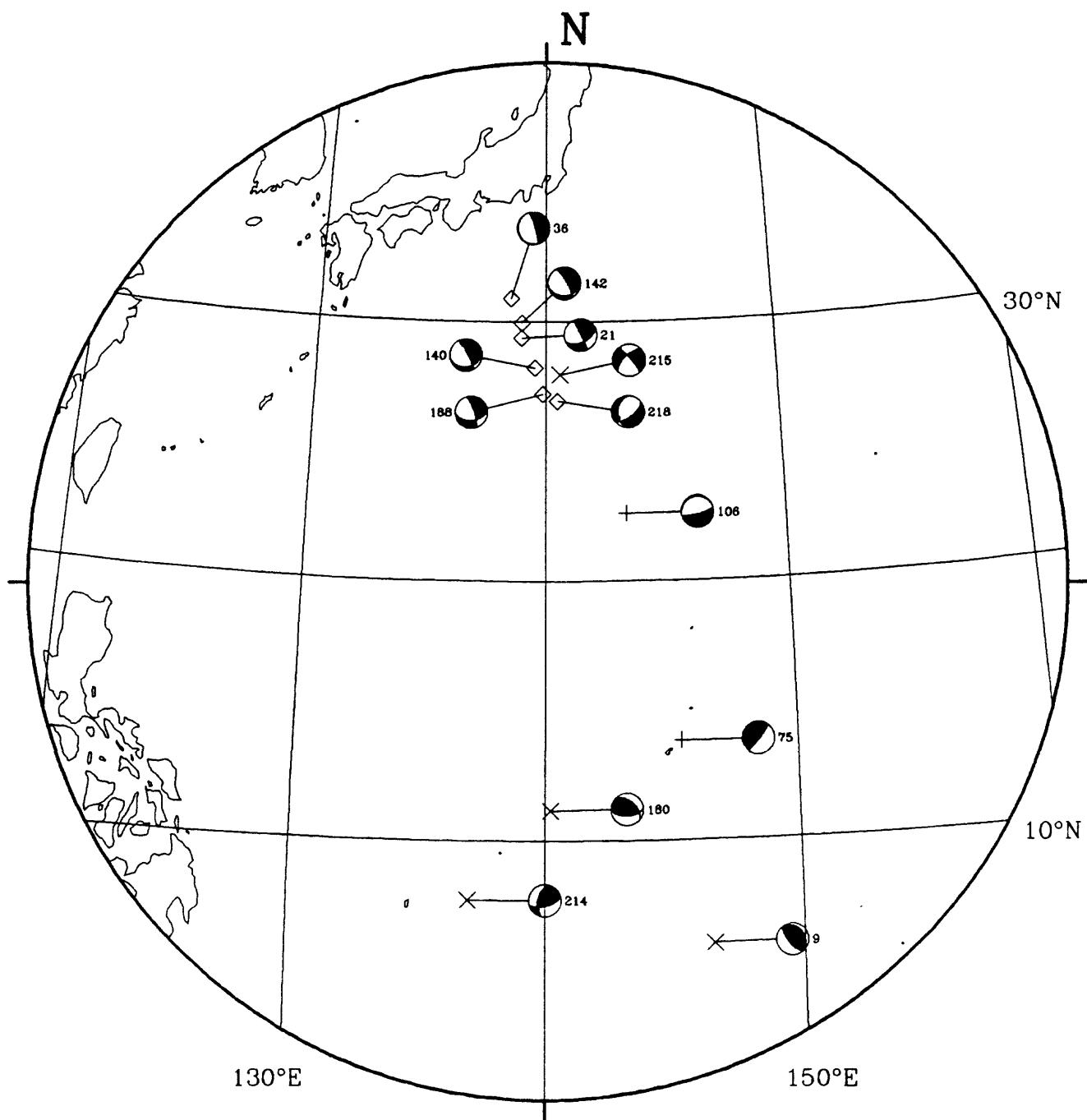


Table 101. Focal mechanism parameters for subdivision,
Bonin-Mariana-Caroline Islands

EVENT #	NODAL PLANE 1 (DEG)			NODAL PLANE 2 (DEG)			T AXIS (DEG)		P AXIS (DEG)		B AXIS (DEG)	
	ϑ	δ	λ	ϑ	δ	λ	PLG	AZM	PLG	AZM	PLG	AZM
9	142	65	90	322	25	90	70	52	20	232	0	142
21	64	50	180	34	90	-40	27	27	27	281	50	154
36	344	83	-90	164	7	-90	38	74	52	254	0	164
75	38	82	90	218	8	90	53	308	37	128	0	38
106	75	80	-90	255	10	-90	35	165	55	345	0	75
140	332	82	-65	79	26	-162	32	41	47	268	25	148
142	330	80	-70	86	22	-153	32	43	51	263	20	146
180	86	55	60	311	45	126	65	299	6	197	24	104
188	342	77	-45	85	46	-162	19	40	40	293	44	149
214	75	60	135	192	52	39	52	39	5	135	38	228
215	225	62	-10	320	81	-52	13	89	26	186	60	336
218	52	65	-64	183	35	-33	16	123	61	2	23	220

Figure 40. Lower hemisphere focal sphere projection for events 9, 21, 36, and 75.

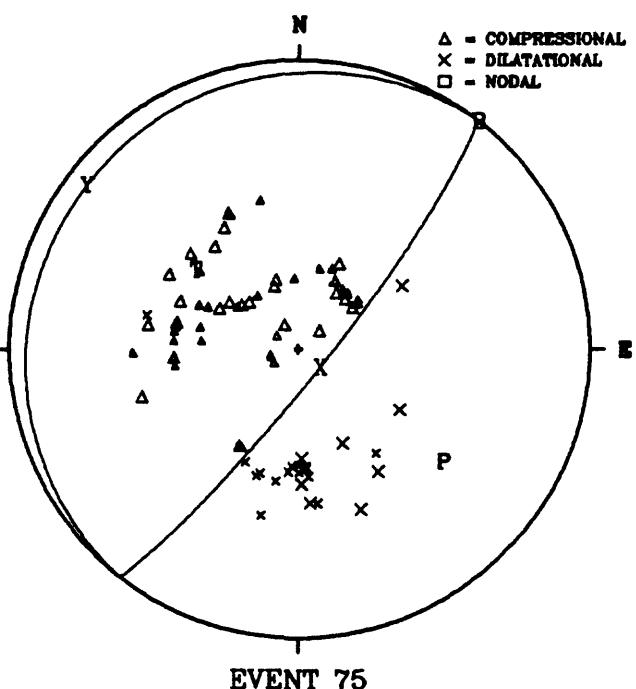
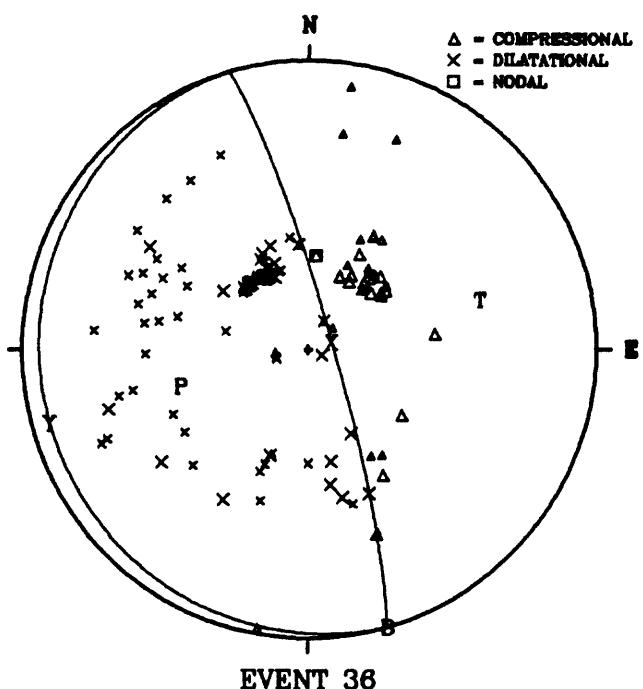
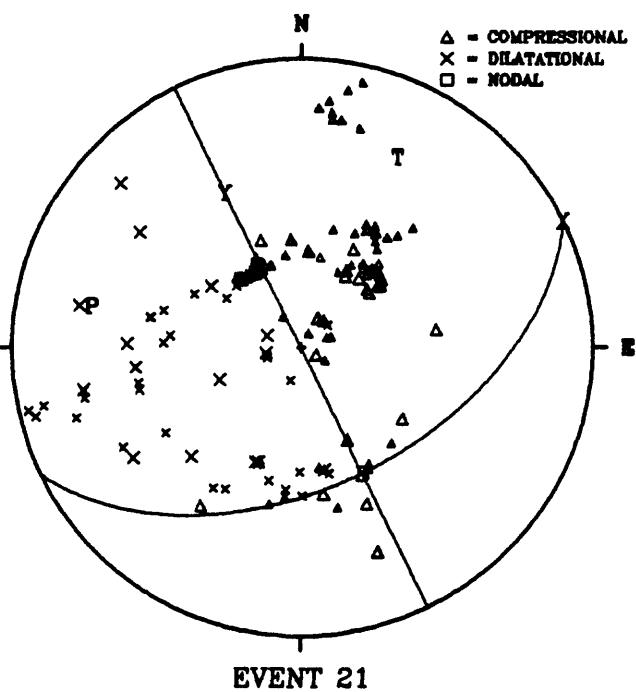
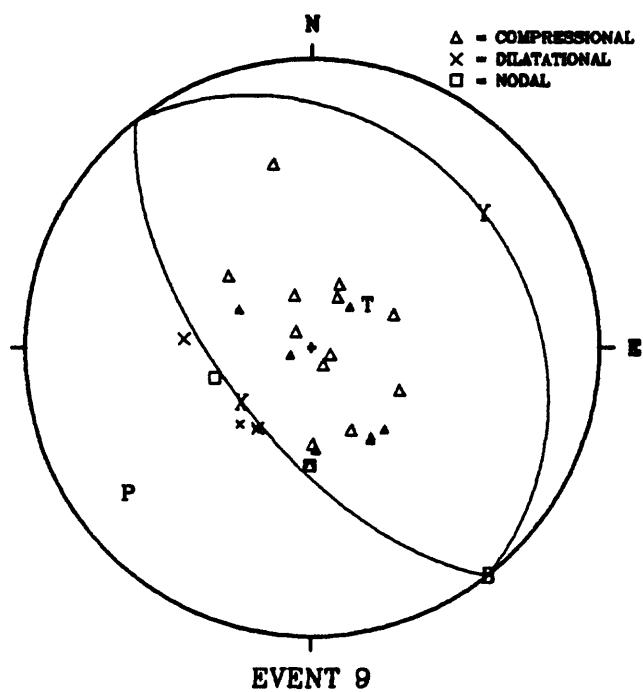
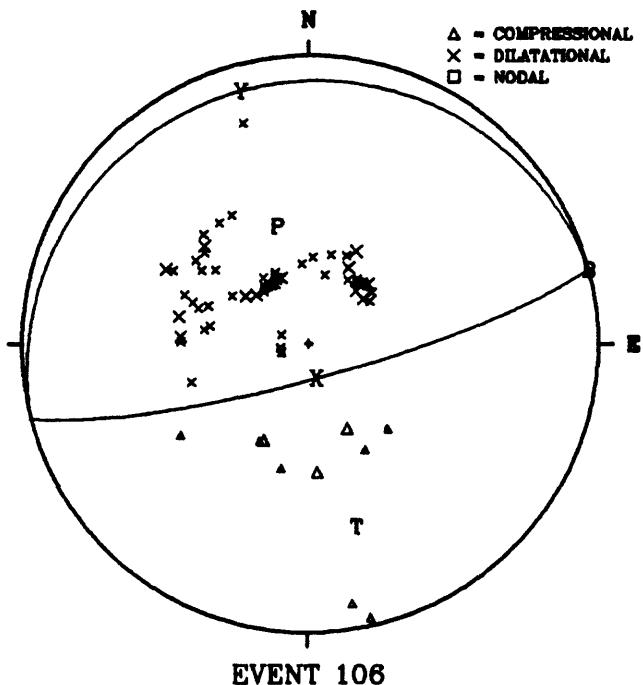
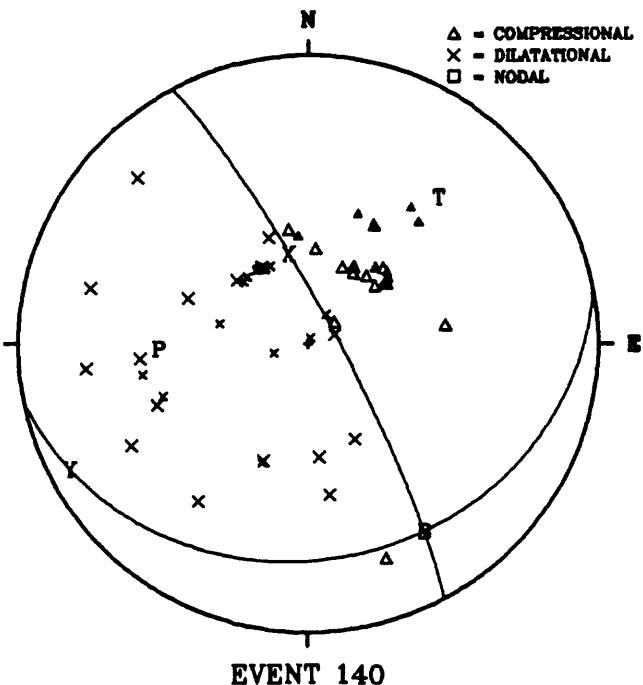


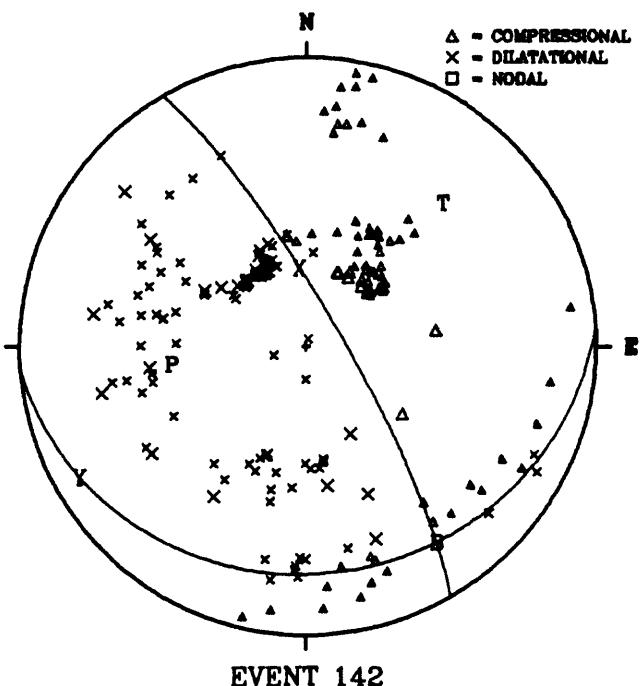
Figure 41. Lower hemisphere focal sphere projection for events 106, 140, 142, and 180.



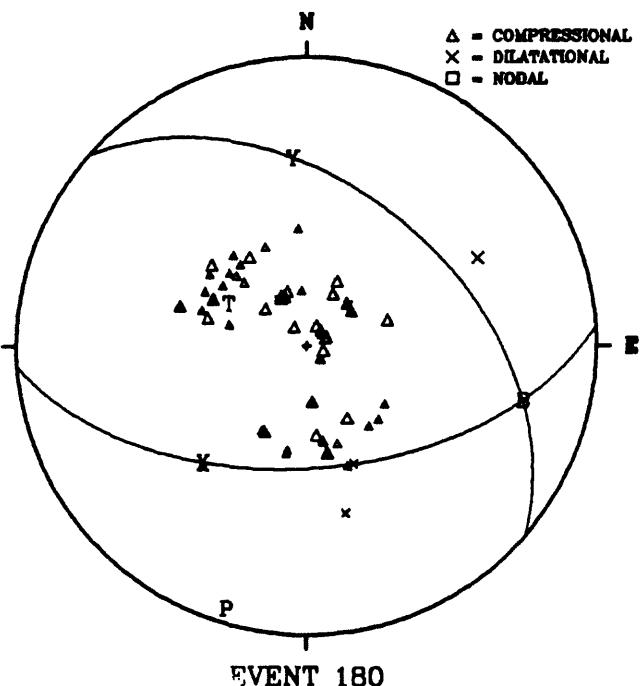
EVENT 106



EVENT 140

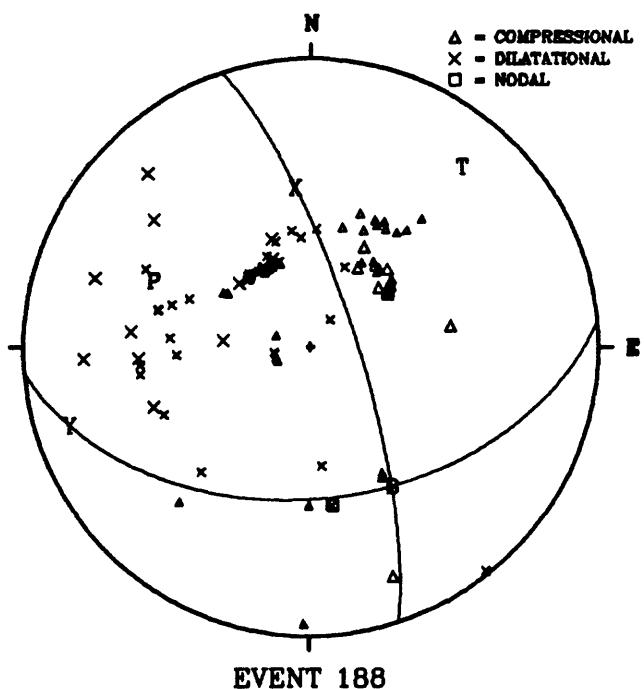


EVENT 142

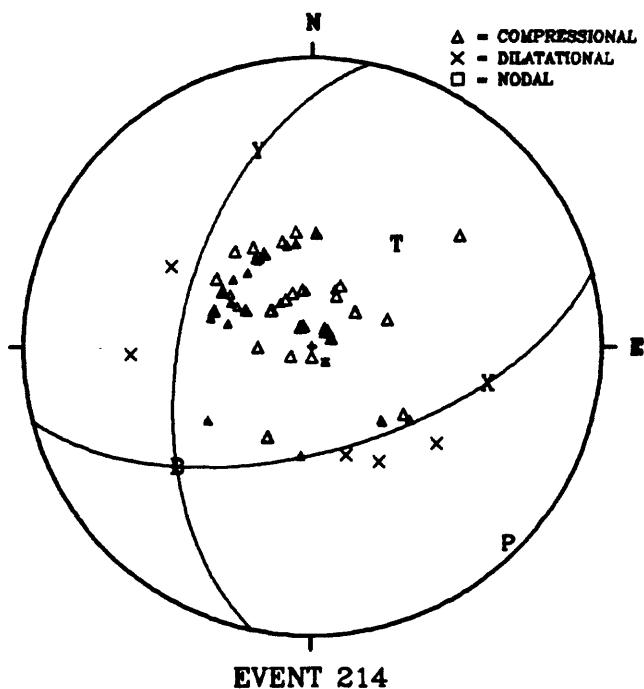


EVENT 180

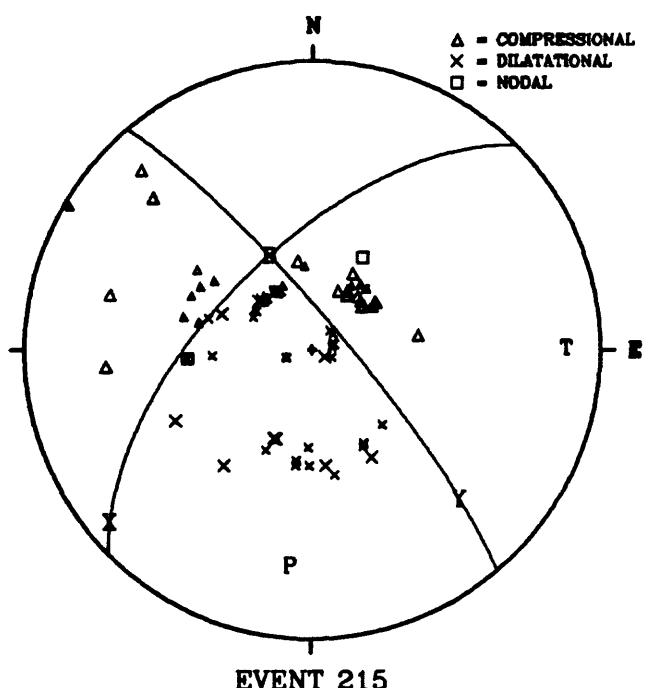
Figure 42. Lower hemisphere focal sphere projection for events 188, 214, 215, and 218.



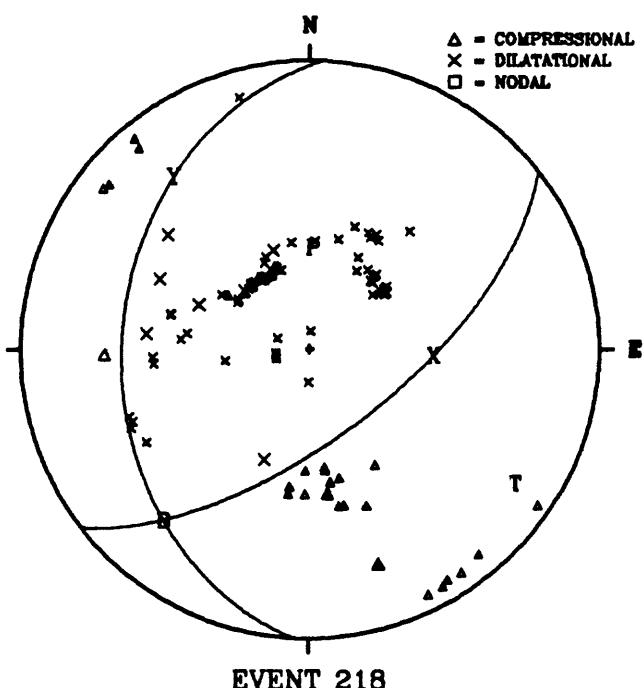
EVENT 188



EVENT 214



EVENT 215



EVENT 218

Table 102. Station data for event 9.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
GUA	7.670	348.10	13.96	55.07	E	C	LP	P
DAV	20.851	274.17	10.17	36.68	I	D	LP	P
CTAO	25.910	180.60	9.38	33.43	E	N	LP	P
CTA	25.910	180.60	9.38	33.43	I	C	LP	P
TATO	30.533	310.86	8.86	31.36	E	C	LP	P
KOU	31.624	146.99	8.79	31.08	I	C	SP	P
PVC	31.908	138.01	8.75	30.92	I	C	SP	P
NOU	34.220	145.88	8.62	30.42	I	C	SP	P
MBL	37.606	223.41	8.41	29.60	I	D	SP	P
YOU	40.080	177.62	8.27	29.06	I	C	SP	F
LEM	40.866	252.43	8.21	28.83	E	N	LP	P
CAN	41.147	176.94	8.21	28.83	I	C	SP	P
WAM	42.009	177.16	8.16	28.64	I	C	SP	P
AFI	45.853	115.83	7.94	27.80	I	C	LP	P
KLB	46.369	214.58	7.91	27.68	I	D	SP	P
NWAO	47.663	213.84	7.85	27.45	E	D	LP	P
TAU	48.665	179.23	7.78	27.19	E	C	LP	P
SNZO	53.669	153.80	7.38	25.69	E	C	LP	P
HON	55.717	68.36	7.22	25.09	E	C	LP	P
PKI	61.700	298.01	6.76	23.39	I	C	SP	P
KKN	61.845	298.23	6.72	23.25	I	C	SP	P
DMN	61.971	298.00	6.72	23.25	I	C	SP	P
COL	74.425	23.80	5.75	19.74	E	C	LP	P
RSNT	88.828	27.33	4.73	16.13	E	C	LP	P
LRM	93.374	43.45	4.63	15.78	I	C	SP	P
KEV	94.216	342.32	4.61	15.71	E	C	LP	P
IST	106.264	315.68	1.89	6.37	E	C	LP	Pdf
BUL	118.232	250.45	1.88	6.33	I	C	SP	PKP
LPA	143.428	145.16	1.72	5.80	E	C	LP	PKP
LPB	144.518	110.10	1.68	5.68	E	C	LP	PKP

Table 103. Station data for event 21.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
NGO	10.071	256.82	11.02	86.23	I	D	SP P
NAH	10.441	255.30	10.98	84.11	I	D	SP P
MIY	10.571	12.87	10.97	83.38	I	C	SP P
KMJ	11.146	257.28	10.89	80.33	I	D	SP P
HAC	11.350	10.09	10.86	79.48	I	C	SP P
HAK	12.525	6.30	10.66	74.94	I	C	SP P
SEO	12.915	312.50	10.60	73.65	I	D	LP P
SUT	13.455	4.13	10.50	72.03	I	C	SP P
SAP	13.817	7.37	10.44	70.98	I	C	SP P
ISI	14.095	252.71	10.39	70.25	I	D	SP P
ASA	14.653	9.89	10.30	68.93	I	C	SP P
RMJ	14.731	7.69	10.29	68.73	I	C	SP P
ABJ	15.249	14.82	10.20	67.43	I	C	SP P
SSE	15.445	280.89	10.16	66.97	E	D	LP P
TWC	15.944	256.81	10.07	65.83	I	D	SP P
TWZ	16.007	258.77	10.06	65.70	I	D	SP P
ANP	16.033	259.13	10.06	65.65	I	D	LP P
GUMO	16.618	159.43	9.97	64.54	E	C	LP P
GUA	16.678	159.34	9.96	64.42	E	C	LP P
PIP	19.998	240.80	9.52	59.53	I	D	SP P
BAG	21.216	236.64	9.40	58.39	I	D	LP P
BJI	21.483	305.80	9.38	58.17	E	D	LP P
DAV	25.469	212.23	8.96	54.27	I	C	LP P
KMI	32.375	271.28	8.50	50.35	I	D	LP P
RAB	35.681	156.95	8.32	48.86	I	C	LP P
PCT	37.542	255.33	8.21	48.06	I	D	SP P
CHG	37.825	263.07	8.20	47.92	I	D	LP P
CHTO	37.825	263.07	8.20	47.92	E	D	LP P
NST	38.158	257.70	8.18	47.79	I	D	SP P
MKS	39.123	211.73	8.13	47.41	I	D	SP P
PMG	39.332	167.14	8.12	47.30	I	C	SP P
ADK	39.701	42.75	8.10	47.16	I	C	SP P
MTN	42.612	191.28	7.94	45.98	I	C	SP P
WSI	42.745	207.66	7.93	45.94	I	D	SP P
KGM	43.417	237.86	7.90	45.68	I	D	SP P
PKI	46.749	281.45	7.68	44.03	I	D	SP P
KKN	46.802	281.78	7.67	44.00	I	D	SP P
LEM	46.912	224.97	7.66	43.94	I	D	LP P
DMN	46.998	281.60	7.65	43.88	I	D	SP P
WB7	49.093	185.68	7.50	42.77	I	D	SP P
WB3	49.176	185.70	7.49	42.73	I	D	SP P
CTA	49.645	170.96	7.45	42.46	I	C	LP P
ISQ	49.767	179.24	7.44	42.38	I	D	SP P
SDN	49.815	40.64	7.44	42.36	I	C	SP P
ASPA	52.923	185.79	7.20	40.71	I	D	SP P
TTA	52.986	31.30	7.20	40.68	I	C	SP P
NDI	53.398	285.45	7.17	40.51	I	D	SP P
KDC	54.370	37.89	7.10	40.04	I	C	SP P
IMA	54.402	27.59	7.10	40.03	I	C	SP P
KOU	55.305	150.80	7.04	39.60	I	C	SP P

Table 103. Station data for event 21 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
PMR	56.106	33.22	6.98	39.20	I	C	SP P
HYB	56.152	272.05	6.98	39.17	I	D	SP P
WBN	56.423	193.35	6.95	39.02	I	D	SP P
COL	56.759	29.24	6.93	38.88	I	C	LP P
FBA	56.759	29.24	6.93	38.88	I	C	SP P
COL	56.759	29.24	6.93	38.88	I	C	SP P
HON	56.970	82.49	6.92	38.79	I	C	LP P
TOA	57.502	32.58	6.88	38.51	I	C	SP P
NOU	57.785	149.62	6.85	38.36	I	C	SP P
NDF	59.784	136.63	6.69	37.31	I	C	SP P
POO	59.802	275.37	6.69	37.30	I	D	SP P
PCA	60.541	34.62	6.63	36.92	I	C	SP P
COO	60.850	167.21	6.62	36.81	I	D	SP P
INK	62.193	24.83	6.51	36.13	I	C	SP P
SIT	63.657	37.45	6.39	35.38	I	C	SP P
KLB	63.854	200.08	6.38	35.28	I	D	SP P
RIV	63.882	168.68	6.37	35.26	I	C	SP P
RIV	63.882	168.68	6.37	35.26	I	D	LP P
ADE	63.961	180.21	6.37	35.22	I	D	SP P
AFI	64.115	125.10	6.36	35.14	E	C	LP P
MBC	64.471	15.06	6.33	34.96	I	C	SP P
MUN	64.691	201.30	6.31	34.85	I	D	LP P
CAN	65.010	170.93	6.28	34.69	I	C	SP P
NWAO	65.256	200.03	6.26	34.57	I	D	LP P
NWAO	65.256	200.03	6.26	34.57	I	D	SP P
WAM	65.852	171.19	6.22	34.27	I	C	SP P
RKG	66.388	199.77	6.18	34.01	I	C	SP P
KHI	66.769	297.17	6.15	33.82	I	D	SP P
KEV	69.908	339.89	5.92	32.44	I	C	LP P
PHC	70.057	42.46	5.91	32.38	I	C	SP P
RSNT	71.536	28.01	5.80	31.71	I	C	LP P
DAG	73.242	354.76	5.69	31.03	I	C	LP P
DAG	73.242	354.76	5.69	31.03	I	C	SP P
TAB	74.457	305.07	5.62	30.60	I	D	LP P
LON	75.085	44.62	5.58	30.37	I	C	LP P
COR	75.121	47.11	5.58	30.36	I	C	LP P
COR	75.121	47.11	5.58	30.36	I	C	SP P
PNT	75.214	41.56	5.58	30.32	I	C	SP P
FHC	76.372	50.83	5.50	29.85	I	C	SP P
EDM	76.717	36.06	5.47	29.71	I	C	SP P
NEW	77.168	41.70	5.44	29.54	I	C	SP P
WDC	77.450	50.51	5.42	29.40	I	C	SP P
SNZO	77.694	153.21	5.40	29.30	E	C	LP P
LHD	78.073	41.16	5.38	29.15	I	C	SP P
LDM	78.111	40.91	5.37	29.13	I	C	SP P
CLX	78.343	41.06	5.34	28.94	I	C	SP P
UPP	78.937	333.93	5.28	28.58	I	C	SP P
BKS	78.932	52.83	5.28	28.59	I	C	SP P
SES	79.442	37.72	5.24	28.33	I	C	SP P
MHC	79.601	53.07	5.23	28.25	I	C	SP P

Table 103. Station data for event 21 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
JAS	80.141	52.07	5.18	27.96	I	C	SP	P
FRI	81.118	52.61	5.12	27.63	I	C	SP	P
LRM	81.165	42.12	5.12	27.61	I	C	SP	P
GDH	81.277	4.47	5.11	27.57	I	C	SP	P
GDH	81.277	4.47	5.11	27.57	I	C	LP	P
FFC	81.323	30.85	5.11	27.55	I	C	SP	P
MNA	81.455	50.73	5.10	27.51	I	C	SP	P
CVO	83.555	319.53	4.97	26.77	I	C	SP	P
PSN	83.624	316.94	4.97	26.75	I	C	SP	P
AKU	83.634	350.65	4.97	26.74	I	C	SP	P
COP	83.822	332.74	4.96	26.70	E	N	LP	P
MLR	83.880	319.36	4.96	26.67	I	D	SP	P
MSR	84.188	320.27	4.93	26.51	I	C	SP	P
BUC1	84.505	318.39	4.89	26.27	I	D	SP	P
MUD	84.522	334.61	4.89	26.26	I	D	SP	P
FRB	84.714	11.90	4.87	26.16	I	C	SP	P
JOS	84.963	324.02	4.85	26.05	I	C	SP	P
KSP	85.503	327.62	4.82	25.86	I	C	SP	P
PSZ	85.663	323.85	4.81	25.81	I	C	SP	P
PVL	85.718	317.80	4.80	25.79	I	C	SP	P
TIM	86.355	321.59	4.77	25.62	I	C	SP	P
HAM	86.437	332.25	4.77	25.60	I	D	SP	P
KDZ	86.512	316.51	4.77	25.58	I	D	SP	P
BRG	86.564	328.66	4.77	25.57	I	C	SP	P
PLD	86.620	317.17	4.76	25.56	I	D	SP	P
CLL	86.681	329.39	4.76	25.54	I	C	SP	P
PRU	86.906	327.76	4.75	25.49	I	C	SP	P
RSSD	86.995	39.98	4.75	25.47	I	C	LP	P
VTS	87.201	318.24	4.74	25.42	I	C	SP	P
RSON	87.636	30.28	4.72	25.32	I	C	LP	P
HOF	87.893	329.20	4.71	25.26	I	C	SP	P
KHC	87.954	327.58	4.71	25.25	I	C	SP	P
WET	88.269	327.92	4.71	25.26	I	C	SP	P
KMR	88.443	326.56	4.71	25.25	I	C	LP	P
SKO	88.613	318.57	4.71	25.24	I	D	SP	P
GRFO	88.637	329.08	4.71	25.24	I	D	LP	P
BHG	89.279	326.91	4.69	25.16	I	C	SP	P
HLW	89.301	304.09	4.69	25.15	I	D	SP	P
DBN	89.358	333.54	4.69	25.15	I	C	LP	P
BNS	89.432	331.85	4.69	25.14	I	C	SP	P
FUR	89.714	327.99	4.68	25.10	I	C	SP	P
ATH	89.732	314.35	4.68	25.10	I	D	SP	P
STU	90.214	329.42	4.68	25.05	E	N	LP	P
UCC	90.696	333.12	4.67	24.99	E	D	LP	P
OGA	90.771	327.22	4.66	24.99	I	C	SP	P
ANMO	91.187	48.34	4.65	24.92	I	C	LP	P
ALQ	91.189	48.34	4.65	24.92	I	C	LP	P
SLE	91.276	329.09	4.65	24.89	E	C	LP	P
SAX	91.273	328.32	4.65	24.89	E	C	LP	P
OSS	91.318	327.54	4.65	24.88	E	C	LP	P

Table 103. Station data for event 21 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
CDF	91.327	330.14	4.64	24.87	I	C	SP P
LHC	91.384	29.79	4.64	24.86	I	C	SP P
ECH	91.527	330.07	4.64	24.84	I	C	SP P
ZUL	91.535	328.96	4.64	24.84	I	C	LP P
LCI	91.679	319.03	4.63	24.81	I	C	SP P
LLS	91.716	328.24	4.63	24.81	E	C	LP P
BRT	91.743	319.81	4.63	24.81	I	D	SP P
VDL	91.780	327.74	4.63	24.81	E	C	LP P
BAF	91.888	329.90	4.63	24.80	I	C	SP P
BSF	91.979	330.00	4.63	24.78	I	C	SP P
DMU	91.986	340.58	4.63	24.78	I	C	SP P
HAU	92.039	330.34	4.63	24.77	I	C	SP P
ROF	92.047	329.85	4.63	24.77	I	C	SP P
DDK	92.264	340.03	4.62	24.72	I	C	SP P
TMA	92.340	327.79	4.61	24.70	E	C	LP P
ALP	92.414	323.06	4.61	24.69	I	D	SP P
DLE	92.411	340.09	4.61	24.69	I	C	SP P
ORI	92.725	319.59	4.60	24.64	I	D	SP P
MMK	92.801	328.23	4.60	24.64	E	C	LP P
DIX	93.033	328.54	4.60	24.60	E	C	LP P
EPT	93.077	50.88	4.60	24.59	I	C	LP P
ORO	93.114	327.94	4.59	24.59	I	D	SP P
MNS	93.160	323.25	4.59	24.58	I	D	SP P
EMS	93.259	328.79	4.59	24.55	E	C	LP P
RMP	93.557	322.83	4.58	24.48	I	C	SP P
LOR	93.673	331.19	4.57	24.46	I	C	SP P
LBF	93.846	330.95	4.56	24.42	I	C	SP P
SSF	93.985	331.25	4.56	24.39	I	C	SP P
GRC	93.980	331.63	4.56	24.39	I	C	SP P
SMF	94.171	330.81	4.56	24.36	I	C	SP P
FLN	94.202	334.43	4.55	24.36	I	C	SP P
LDF	94.205	334.13	4.55	24.36	I	C	SP P
AVF	94.263	331.17	4.55	24.35	I	C	SP P
PCR	94.644	248.43	4.55	24.31	E	D	LP P
GRR	94.652	334.42	4.54	24.31	I	C	SP P
CVF	94.970	325.42	4.54	24.27	I	C	SP P
LPF	95.016	334.32	4.54	24.27	I	C	SP P
MZF	95.043	331.24	4.54	24.26	I	C	SP P
TCF	95.141	331.49	4.54	24.25	I	C	SP P
FRF	95.299	327.31	4.53	24.24	I	C	SP P
LSF	95.454	331.85	4.53	24.23	I	C	SP P
MFF	95.845	333.00	4.52	24.18	I	C	SP P
RJF	96.220	331.29	4.52	24.14	I	C	SP P
CAF	96.292	330.75	4.51	24.13	I	C	SP P
LFF	96.839	331.52	4.49	24.02	I	C	SP P
INY	101.474	25.96	4.44	23.71	I	C	SP Pdf
BLA	104.209	31.49	4.44	23.71	I	C	LP Pdf
SHA	105.343	40.85	1.89	9.86	I	C	LP PKP
MAL	105.814	330.10	1.89	9.86	I	C	SP PKP
BNG	113.761	289.99	1.88	9.82	I	D	LP PKP

Table 103. Station data for event 21 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BUL	116.858	260.99	1.88	9.79	I	D	LP	PKP
SLR	119.227	255.27	1.87	9.77	I	D	SP	PKP
KSR	120.443	255.63	1.87	9.76	I	D	SP	PKP
SEK	120.652	252.70	1.87	9.76	I	D	SP	PKP
BLF	122.097	252.30	1.87	9.75	I	D	SP	PKP
UPA	126.850	50.18	1.86	9.70	I	D	SP	PKP
SJG	126.974	30.31	1.86	9.70	I	C	LP	PKP
CAR	133.184	36.04	1.83	9.54	I	C	SP	PKP
SNA	133.590	197.03	1.83	9.53	I	D	SP	PKP
TRN	135.666	29.27	1.81	9.43	E	C	LP	PKP
NNA	142.532	70.12	1.72	8.97	I	C	SP	PKP
LPB	152.107	68.73	1.48	7.69	I	C	SP	PKP
TMU	152.353	118.16	1.47	7.64	I	C	SP	PKP
LPA	164.677	115.52	0.91	4.73	E	C	LP	PKP
BAO	164.934	26.55	0.90	4.66	I	C	SP	PKP

Table 104. Station data for event 36.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
AOM	10.068	10.27	11.64	92.26	I	C	SP	P
HAK	11.042	9.12	11.51	81.01	I	C	SP	P
MYK	13.131	245.52	10.80	67.98	I	D	SP	P
NEM	13.639	22.68	10.74	67.20	I	C	SP	P
ISI	14.234	246.08	10.60	65.49	J	D	SP	P
WAK	14.704	9.03	10.51	64.35	I	C	SP	P
SSE	14.794	275.16	10.49	64.15	I	D	SP	P
MDJ	15.350	335.51	10.39	63.04	I	D	SP	P
DL2	15.911	304.64	10.28	61.86	I	D	SP	P
ANP	15.980	253.25	10.26	61.72	I	D	LP	P
SNY	16.157	316.49	10.23	61.36	I	D	SP	P
CN2	16.469	324.98	10.17	60.73	I	D	SP	P
GUA	18.288	159.52	9.86	57.75	I	C	LP	P
QZH	18.502	256.14	9.82	57.44	I	D	SP	P
TIA	18.517	292.28	9.82	57.42	I	D	SP	P
BJI	20.245	302.82	9.59	55.34	I	D	LP	P
BAG	21.762	232.52	9.42	53.93	I	D	LP	P
TIY	22.480	294.60	9.36	53.42	I	D	SP	P
GZH	23.637	256.86	9.26	52.58	I	D	SP	P
BTO	24.912	300.66	9.13	51.54	I	D	SP	P
XAN	25.053	284.99	9.11	51.40	J	D	SP	P
DAV	26.580	209.57	8.92	49.93	I	D	LP	P
LZH	29.204	289.54	8.72	48.46	I	D	SP	P
CD2	29.681	279.07	8.69	48.19	I	D	SP	P
KMI	31.941	268.55	8.55	47.20	I	D	SP	P
KKM	32.348	224.65	8.54	47.09	I	D	SP	P
GTA	32.494	295.83	8.53	47.04	I	D	SP	P
MOM	33.859	163.76	8.45	46.45	I	D	SP	P
AAI	35.758	197.67	8.34	45.69	I	D	SP	P
RAB	37.283	156.98	8.26	45.12	E	D	LP	P
LSA	40.601	280.80	8.08	43.91	I	D	SP	P
PMG	40.946	166.80	8.06	43.77	E	D	LP	P
WMQ	41.722	302.63	8.02	43.47	I	D	SP	P
SNG	42.506	244.21	7.98	43.21	I	D	SP	P
KGM	43.900	236.00	7.90	42.71	I	D	SP	P
HNR	45.107	149.28	7.83	42.22	I	C	LP	P
KSH	50.858	297.74	7.39	39.35	I	D	SP	P
CTAO	51.251	170.56	7.36	39.19	E	D	LP	P
CTA	51.251	170.56	7.36	39.19	I	D	LP	P
NDI	52.578	284.15	7.26	38.54	I	D	SP	P
MBL	54.758	201.38	7.10	37.56	I	D	SP	P
PME	55.096	33.76	7.08	37.42	I	C	SP	P
COL	55.620	29.76	7.04	37.16	I	C	LP	P
COL	55.620	29.76	7.04	37.16	I	C	SP	P
PVC	56.252	145.18	7.00	36.91	I	C	SP	P
HON	57.211	83.27	6.92	36.45	I	C	LP	P
NOU	59.348	149.62	6.76	35.46	I	C	SP	P
MEK	60.266	200.53	6.69	35.02	I	D	SP	P
INK	60.968	25.15	6.63	34.68	I	C	SP	P
AFI	65.369	125.33	6.28	32.60	E	C	LP	P

Table 104. Station data for event 36 . . . continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
RIV	65.494	168.37	6.27	32.54	I	D	LP P
ADE	65.517	179.75	6.27	32.53	I	D	SP P
KBS	66.268	350.22	6.21	32.18	I	D	SP P
NWAO	66.573	199.36	6.18	32.04	E	D	LP P
RKG	67.709	199.13	6.10	31.58	I	C	SP P
KEV	68.297	339.59	6.05	31.30	J	D	LP P
RSNT	70.369	28.15	5.91	30.46	I	C	LP P
KJF	70.947	334.33	5.87	30.26	J	D	LP P
DAG	71.652	354.60	5.82	29.95	I	D	LP P
DAG	71.652	354.60	5.82	29.95	I	C	SP P
TAB	73.211	304.52	5.71	29.37	I	D	LP P
NUR	74.182	331.92	5.66	29.03	I	D	LP P
LON	74.286	44.75	5.64	28.97	I	C	LP P
EDM	75.717	36.12	5.56	28.48	I	C	SP P
FHC	75.729	50.94	5.56	28.47	I	C	SP P
NEW	76.298	41.77	5.52	28.28	I	C	SP P
YKM	76.784	40.74	5.49	28.12	I	C	SP P
WDC	76.799	50.60	5.49	28.12	I	C	SP P
RXF	77.111	40.52	5.47	28.00	I	C	SP P
LDM	77.222	40.95	5.46	27.95	I	C	SP P
UPP	77.349	333.62	5.45	27.88	I	D	SP P
CLX	77.457	41.10	5.44	27.84	I	C	SP P
BKS	78.340	52.88	5.37	27.42	I	C	LP P
SES	78.479	37.72	5.35	27.33	I	C	SP P
SNZO	79.279	153.02	5.28	26.93	E	D	LP P
GDH	79.759	4.31	5.23	26.67	E	N	LP P
LRM	80.304	42.10	5.18	26.41	I	C	SP P
FCC	80.588	24.79	5.16	26.30	I	C	SP P
PPE	81.045	318.92	5.14	26.16	I	C	SP P
BER	81.268	338.47	5.13	26.12	I	D	SP P
BER	81.268	338.47	5.13	26.12	I	D	LP P
CFR	81.338	317.85	5.13	26.10	I	D	SP P
TLB	81.753	317.41	5.10	25.97	I	D	SP P
VRI	81.752	319.00	5.10	25.98	I	D	SP P
CWC	81.924	52.38	5.09	25.92	I	C	LP P
PSN	82.191	316.60	5.08	25.83	I	D	SP P
COP	82.240	332.45	5.07	25.82	I	D	LP P
ISR	82.288	318.48	5.07	25.81	I	D	SP P
MLR	82.417	319.03	5.06	25.76	I	D	SP P
KRA	82.739	325.17	5.04	25.63	I	D	SP P
MDB	82.894	320.21	5.03	25.55	I	D	SP P
MUD	82.930	334.33	5.02	25.54	I	C	SP P
SBB	83.038	53.75	5.02	25.50	I	C	LP P
BUC1	83.054	318.06	5.02	25.49	I	D	SP P
CMP	83.061	319.23	5.02	25.49	I	D	SP P
SPC	83.150	324.37	5.01	25.46	I	D	SP P
IST	83.227	314.08	5.00	25.43	I	D	LP P
JOS	83.449	323.71	4.99	25.37	I	D	SP P
JMB	83.854	316.31	4.97	25.25	I	C	SP P
KSP	83.957	327.32	4.96	25.20	I	D	SP P

Table 104. Station data for event 36 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BRN	84.245	329.81	4.94	25.06	I	D	SP	P
PVL	84.274	317.48	4.93	25.03	I	D	SP	P
DST	84.291	313.07	4.93	25.02	I	D	SP	P
EDC	84.334	314.02	4.92	24.99	I	C	SP	P
DIM	84.700	316.42	4.89	24.81	I	D	SP	P
HAM	84.858	331.98	4.88	24.76	J	D	SP	P
BRG	85.009	328.38	4.87	24.69	I	D	SP	P
SRO	85.023	324.18	4.87	24.68	I	C	SP	P
KDZ	85.085	316.20	4.86	24.66	I	C	SP	P
CLL	85.121	329.11	4.86	24.64	I	D	SP	P
PLD	85.184	316.87	4.85	24.62	I	D	SP	P
PRU	85.359	327.48	4.84	24.53	I	D	SP	P
ZST	85.369	325.01	4.84	24.53	I	D	SP	P
VKA	85.706	325.42	4.82	24.42	I	D	SP	P
VTS	85.752	317.95	4.82	24.43	I	D	SP	P
IZM	85.861	312.72	4.82	24.41	I	D	SP	P
YER	85.955	311.22	4.81	24.39	I	D	SP	P
RSSD	86.082	39.81	4.81	24.35	I	C	LP	P
MOX	86.209	329.28	4.80	24.31	I	D	LP	P
HOF	86.334	328.93	4.79	24.26	I	C	SP	P
RSON	86.511	30.09	4.78	24.21	I	C	LP	P
WIT	86.642	333.03	4.77	24.18	I	D	SP	P
WET	86.721	327.64	4.77	24.16	I	D	SP	P
KMR	86.906	326.28	4.76	24.13	E	C	LP	P
VAY	86.921	317.25	4.76	24.12	I	D	SP	P
GRF	87.077	328.81	4.76	24.08	I	D	SP	P
GRFO	87.079	328.81	4.76	24.08	I	D	LP	P
THE	87.123	316.52	4.75	24.07	I	D	SP	P
SKO	87.160	318.29	4.75	24.06	I	D	SP	P
BHG	87.739	326.65	4.72	23.90	I	D	SP	P
DBN	87.772	333.28	4.72	23.91	I	D	LP	P
BNS	87.856	331.59	4.72	23.90	I	D	SP	P
KBA	87.975	325.97	4.72	23.89	I	D	SP	P
TTG	88.091	319.69	4.72	23.88	I	D	SP	P
LJU	88.124	324.65	4.72	23.88	I	D	SP	P
FUR	88.164	327.73	4.72	23.87	I	D	SP	P
ATH	88.334	314.09	4.71	23.86	I	D	SP	P
CEY	88.390	324.49	4.71	23.85	I	D	SP	P
ENN	88.515	332.07	4.71	23.84	I	D	SP	P
STU	88.653	329.16	4.71	23.82	I	D	LP	P
TRI	88.741	324.79	4.71	23.81	I	C	SP	P
ARO	88.883	282.68	4.70	23.79	I	D	SP	P
UCC	89.112	332.87	4.70	23.78	I	D	LP	P
OGA	89.228	326.97	4.70	23.78	I	D	SP	P
DMU	90.374	340.33	4.68	23.69	I	D	SP	P
ANMO	90.476	48.07	4.68	23.68	I	C	LP	P
DDK	90.653	339.78	4.67	23.65	I	D	SP	P
DLE	90.800	339.84	4.67	23.60	I	D	SP	P
DCN	90.966	340.25	4.66	23.57	I	D	SP	P
ETA	91.215	339.37	4.65	23.54	I	D	SP	P

Table 104. Station data for event 36 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
VDM	91.318	332.91	4.65	23.54	E	D	LP	P
ECB	91.675	339.51	4.64	23.48	I	D	SP	P
ECP	91.712	339.20	4.64	23.48	I	D	SP	P
GRC	92.404	331.40	4.62	23.37	J	D	SP	P
ACO	93.805	42.84	4.58	23.13	J	C	SP	P
TUL	96.290	41.50	4.51	22.79	E	C	LP	P
GAC	97.781	23.24	4.48	22.59	J	C	LP	P
LGR	98.640	331.85	4.46	22.48	J	C	SP	P
RSNY	99.117	23.21	4.44	22.38	I	C	LP	P
PTO	102.112	335.14	4.44	22.39	I	D	LP	Pdf
BLA	103.105	30.95	4.44	22.39	J	C	LP	Pdf
CRT	103.508	329.65	4.44	22.39	I	C	SP	Pdf
MTD	112.660	263.49	1.89	9.31	I	C	SP	PKP
KRI	114.365	264.37	1.88	9.29	J	C	SP	PKP
BUL	116.662	261.54	1.88	9.27	I	C	SP	PKP
EVA	118.822	254.80	1.87	9.25	I	D	SP	PKP
SLR	119.191	255.92	1.87	9.25	J	D	SP	PKP
BPI	119.567	255.56	1.87	9.25	I	D	SP	PKP
SEK	120.688	253.41	1.87	9.25	I	D	SP	PKP
BFS	120.870	255.26	1.87	9.24	I	D	SP	PKP
BLF	122.144	253.06	1.87	9.23	I	D	SP	PKP
SJG	125.840	29.21	1.86	9.20	I	C	SP	PKP
SJG	125.840	29.21	1.86	9.20	E	D	LP	PKP
UPA	126.172	48.84	1.86	9.20	I	C	SP	PKP
LPA	165.688	110.50	0.86	4.22	E	D	LP	PKP

Table 105. Station data for event 75.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
GUA	0.534	238.17	7.78	145.69	I	D	LP	P
RAB	19.120	158.89	10.50	49.55	E	D	LP	P
TZZ	19.406	192.55	10.42	49.07	I	D	SP	P
CNP	20.213	268.71	10.21	47.77	I	C	SP	P
DAV	20.581	253.03	10.13	47.20	I	C	LP	P
LMG	22.746	172.90	9.71	44.72	I	D	SP	P
CVP	22.991	282.74	9.67	44.54	I	D	SP	P
PMG	23.143	175.54	9.65	44.40	I	D	LP	P
MAT	23.516	345.41	9.59	44.05	I	C	SP	P
SHK	23.605	333.04	9.58	43.98	I	C	LP	P
SHK	23.605	333.04	9.58	43.98	I	C	SP	P
BAG	24.074	279.30	9.52	43.66	I	C	LP	P
ANP	25.125	300.32	9.41	43.02	I	C	LP	P
HNR	27.251	147.18	9.21	41.89	I	D	LP	P
SSE	28.098	311.72	9.10	41.27	I	C	LP	P
SEO	28.773	328.57	9.00	40.73	I	C	LP	P
CTAO	33.703	178.52	8.61	38.62	I	D	LP	P
CTA	33.703	178.52	8.61	38.62	I	D	SP	P
ISQ	34.789	189.59	8.54	38.27	I	D	SP	P
WB2	35.259	198.16	8.52	38.12	I	D	SP	P
BJI	36.571	321.04	8.45	37.76	E	C	LP	P
PVC	38.669	143.53	8.31	37.06	I	D	SP	P
ASPA	38.907	196.89	8.31	37.02	I	D	SP	P
RMQ	40.196	175.31	8.23	36.63	I	D	SP	P
KM1	41.580	292.30	8.16	36.25	I	C	LP	P
LZH	43.262	308.40	8.07	35.78	I	C	SP	P
WBN	43.726	204.78	8.04	35.64	I	D	SP	P
NST	43.733	278.30	8.04	35.64	I	C	SP	P
NNT	44.405	273.96	8.01	35.48	I	C	SP	P
SNG	44.449	266.18	8.00	35.47	I	C	LP	P
SNG	44.449	266.18	8.00	35.47	I	C	SP	P
IPM	44.663	262.47	7.99	35.41	I	C	SP	P
BDT	44.733	280.62	7.99	35.39	I	C	SP	P
CHTO	44.745	282.84	7.99	35.39	I	C	LP	P
CHG	44.745	282.84	7.99	35.39	I	C	SP	P
CHG	44.745	282.84	7.99	35.39	I	C	LP	P
CMS	45.043	179.46	7.97	35.29	I	D	SP	P
STK	45.580	184.51	7.94	35.13	I	D	SP	P
YOU	47.910	176.65	7.80	34.42	I	D	SP	P
CAN	48.985	176.08	7.71	34.00	I	D	SP	P
WAM	49.845	176.29	7.64	33.65	I	D	SP	P
AFI	50.584	121.27	7.58	33.36	E	D	LP	P
BFD	50.786	182.92	7.57	33.28	I	D	SP	P
TOO	51.111	179.89	7.54	33.15	I	D	SP	P
BAL	52.073	211.63	7.47	32.77	I	C	SP	P
MUN	53.429	211.05	7.36	32.23	E	C	LP	P
NWAQ	53.698	209.49	7.34	32.13	I	C	SP	P
TAU	56.471	178.29	7.12	31.09	E	D	LP	P
PKI	57.258	293.97	7.06	30.78	I	C	SP	P
KKN	57.376	294.23	7.05	30.74	I	C	SP	P

Table 105. Station data for event 75 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
DMN	57.528	294.01	7.04	30.69	I	C	SP P
SNZO	61.184	155.09	6.76	29.33	I	D	LP P
HYB	64.177	282.82	6.52	28.19	I	C	SP P
NDI	64.479	295.34	6.49	28.08	I	C	SP P
KOD	66.331	275.24	6.34	27.35	I	C	SP P
COL	67.806	25.06	6.22	26.79	E	C	LP P
QUE	73.294	297.67	5.81	24.93	I	C	LP P
INK	73.966	22.47	5.76	24.70	I	C	SP P
MBC	77.929	14.11	5.51	23.52	I	C	SP P
MHI	78.684	304.74	5.46	23.31	I	C	LP P
RSNT	82.439	27.48	5.13	21.85	I	C	LP P
YKC	82.492	27.47	5.13	21.84	I	C	SP P
WDC	82.709	50.12	5.12	21.78	I	C	SP P
JAS1	84.896	52.36	4.98	21.16	I	C	SP P
YKM	85.478	40.88	4.94	21.00	I	C	SP P
EDM	85.673	36.26	4.92	20.91	I	C	SP P
LHD	85.740	41.44	4.92	20.88	I	C	SP P
LDM	85.841	41.21	4.90	20.79	I	C	SP P
RXF	85.850	40.77	4.90	20.79	I	C	SP P
IR5	86.003	305.11	4.88	20.72	I	C	SP P
CLX	86.027	41.41	4.88	20.71	I	C	SP P
KEV	86.457	342.13	4.85	20.60	I	C	LP P
MNA	86.503	51.43	4.85	20.59	I	C	SP P
SES	87.917	38.51	4.76	20.21	I	C	SP P
TAB	88.562	308.76	4.74	20.09	E	C	LP P
DAG	89.100	356.39	4.72	20.00	I	C	SP P
RSSD	94.667	42.57	4.58	19.41	E	C	LP P
ANMO	96.516	51.78	4.53	19.17	E	C	LP P
RSON	97.632	33.27	4.51	19.08	E	C	LP P
ANTO	97.794	314.17	4.50	19.06	I	C	LP P
KONO	98.576	339.01	4.49	18.99	I	C	LP P
CEA	98.852	322.87	4.48	18.93	I	C	SP P
STU	106.606	331.44	1.89	7.88	E	C	LP PKP
SHA	112.147	48.40	1.89	7.87	E	C	LP PKP
MTD	116.330	257.96	1.88	7.83	I	C	SP PKP
KRI	118.208	258.17	1.88	7.82	I	C	SP PKP
BUL	119.490	254.54	1.87	7.81	I	C	SP PKP
GRM	121.446	239.33	1.87	7.80	I	C	SP PKP
KIC	144.199	302.17	1.70	7.07	I	C	SP PKP

Table 106. Station data for event 106.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
CBI	4.584	347.02	13.59	93.34	I	C	SP	P
GUA	9.144	170.30	13.41	80.21	I	C	SP	P
MAT	14.577	343.39	12.70	68.93	I	D	SP	P
SSE	21.464	297.89	9.89	46.62	I	D	LP	P
CGP	22.774	234.77	9.67	45.27	I	C	SP	P
NJ2	23.650	298.69	9.54	44.53	I	D	SP	P
DL2	24.639	316.19	9.43	43.85	I	D	SP	P
SNY	25.319	323.79	9.37	43.51	I	D	SP	P
CN2	25.790	329.26	9.33	43.28	I	D	SP	P
BJI	28.820	313.36	8.97	41.21	E	D	LP	P
TIY	30.496	306.62	8.81	40.35	I	D	SP	P
HHC	32.327	311.67	8.68	39.64	I	D	SP	P
CD2	36.144	291.81	8.45	38.40	I	D	SP	P
KMI	37.113	282.15	8.39	38.08	I	D	LP	P
GTA	40.465	304.71	8.20	37.07	I	D	SP	P
CHTO	41.582	273.24	8.15	36.77	E	D	LP	P
CHTO	41.582	273.24	8.15	36.77	I	D	SP	P
CHG	41.582	273.24	8.15	36.77	I	D	SP	P
BDT	41.904	270.94	8.13	36.66	I	D	SP	P
CTAO	42.526	175.94	8.10	36.52	I	C	LP	P
CTA	42.526	175.94	8.10	36.52	I	C	LP	P
WB2	43.187	192.39	8.06	36.32	I	C	SP	P
LSA	47.051	290.10	7.84	35.16	I	D	SP	P
PSI	47.371	251.82	7.82	35.07	I	D	SP	P
NOU	49.997	151.66	7.61	34.01	I	C	SP	P
WMQ	50.117	308.85	7.60	33.96	I	D	SP	P
PK1	52.297	288.06	7.43	33.08	I	D	SP	P
KKN	52.380	288.35	7.42	33.05	I	D	SP	P
DMN	52.558	288.15	7.41	32.97	I	D	SP	P
VUN	53.000	136.71	7.37	32.80	I	C	SP	P
BAL	58.757	206.87	6.94	30.66	I	C	SP	P
ND1	59.256	290.80	6.90	30.47	I	D	SP	P
NWAO	60.578	205.14	6.79	29.95	E	C	LP	P
HYB	60.686	277.87	6.79	29.91	I	D	SP	P
COL	60.807	27.12	6.78	29.86	E	D	LP	P
FBAL	60.955	27.13	6.76	29.81	E	D	LP	P
POO	64.659	280.51	6.47	28.38	I	D	SP	P
INK	66.685	23.70	6.30	27.55	I	D	SP	P
SNZO	69.933	155.32	6.05	26.37	E	C	LP	P
MBC	69.944	14.64	6.05	26.37	I	D	SP	P
MHI	72.220	302.49	5.88	25.58	I	D	SP	P
ALE	74.367	3.39	5.73	24.90	I	D	SP	P
RSNT	75.603	27.97	5.64	24.50	E	D	LP	P
YKC	75.655	27.95	5.64	24.48	I	D	SP	P
LON	77.075	44.67	5.56	24.10	E	D	LP	P
MIN	79.390	50.77	5.39	23.34	I	D	SP	P
NEW	79.519	42.08	5.38	23.28	I	D	SP	P
EDM	79.784	36.49	5.35	23.13	I	D	SP	P
DAG	80.251	355.88	5.29	22.90	I	D	SP	P
RXF	80.510	41.00	5.27	22.78	I	D	LP	P

Table 106. Station data for event 106 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
LDM	80.555	41.43	5.27	22.76	I	D	LP	P
CLX	80.766	41.61	5.25	22.69	I	D	LP	P
OBN	80.775	326.17	5.25	22.69	I	D	SP	P
TAB	81.625	307.64	5.18	22.38	E	D	LP	P
SUF	81.685	335.52	5.18	22.35	I	D	SP	P
SES	82.281	38.47	5.13	22.16	I	D	SP	P
NUR	83.534	334.09	5.06	21.82	I	D	SP	P
FFC	84.988	31.95	4.97	21.43	I	D	SP	P
LAC	85.481	54.72	4.93	21.25	I	D	SP	P
UPP	86.692	335.76	4.83	20.78	I	D	SP	P
TBY	88.296	337.58	4.75	20.42	I	D	SP	P
RSSD	89.484	41.67	4.71	20.25	E	D	LP	P
KONO	89.728	338.47	4.71	20.23	E	D	LP	P
ANTO	90.319	313.88	4.70	20.21	I	D	LP	P
FRB	90.386	13.59	4.70	20.21	I	D	SP	P
HNM	91.224	323.27	4.69	20.14	I	D	SP	P
MLR	91.572	321.33	4.68	20.11	I	D	SP	P
COP	91.590	334.64	4.68	20.10	I	D	SP	P
KRA	92.046	327.41	4.66	20.02	I	D	SP	P
ANMO	92.542	50.51	4.65	19.97	E	D	LP	P
JOS	92.729	325.95	4.65	19.96	I	D	SP	P
KSP	93.292	329.54	4.63	19.88	I	D	SP	P
BRG	94.353	330.58	4.59	19.73	I	D	SP	P
CLL	94.469	331.31	4.59	19.72	I	D	SP	P
PRU	94.695	329.68	4.58	19.68	I	D	SP	P
VTS	94.867	320.14	4.58	19.64	I	D	SP	P
HOF	95.682	331.12	4.55	19.51	I	D	SP	P
KHC	95.743	329.50	4.54	19.50	I	D	SP	P
SKO	96.287	320.43	4.53	19.46	I	D	SP	P
BHG	97.066	328.82	4.52	19.39	I	D	SP	P
CDF	99.113	332.08	4.47	19.16	I	D	SP	P
MTD	115.956	261.72	1.88	7.94	I	D	SP	PKP
KRI	117.772	262.30	1.88	7.92	I	D	SP	PKP
BNG	119.756	289.40	1.87	7.91	I	D	SP	PKP
EVA	120.652	251.75	1.87	7.91	I	C	SP	PKP
BPI	121.506	252.35	1.87	7.90	I	C	SP	PKP
KSR	122.445	252.94	1.87	7.90	I	D	SP	PKP

Table 107. Station data for event 140.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
SEO	14.058	314.66	10.35	71.47	I	D	LP P
GUA	15.454	159.96	10.11	67.87	I	C	LP P
SSE	16.196	284.60	9.99	66.27	I	D	LP P
ANP	16.376	263.47	9.97	65.95	I	D	LP P
BAG	21.073	240.07	9.40	59.48	I	D	LP P
DAV	24.826	214.74	9.02	55.73	I	D	LP P
SMY	35.379	36.60	8.32	49.68	I	C	SP P
CHTO	38.222	264.84	8.17	48.47	E	D	LP PO
NST	38.445	259.49	8.16	48.36	I	D	SP P
ADK	40.178	41.68	8.07	47.64	I	C	SP P
SNG	42.292	247.84	7.95	46.79	I	D	LP P
BSI	47.610	250.08	7.60	44.10	I	D	SP P
CTA	48.465	171.54	7.54	43.67	I	D	LP P
BRW	55.158	20.63	7.04	40.18	I	C	SP P
HON	56.607	82.00	6.93	39.45	I	C	LP P
COL	57.481	28.88	6.87	38.98	I	C	LP P
FBA	57.481	28.88	6.87	38.98	I	C	SP P
QUE	62.344	291.14	6.49	36.46	I	D	LP P
KLB	62.991	200.80	6.43	36.12	I	D	SP P
NWAO	64.392	200.72	6.32	35.40	E	D	LP P
NWAO	64.392	200.72	6.32	35.40	I	D	SP P
KBS	69.059	350.55	5.98	33.22	I	C	LP P
KEV	71.132	340.13	5.83	32.30	I	D	LP P
TAU	71.141	173.95	5.83	32.30	I	D	LP P
DAG	74.397	354.93	5.62	30.98	I	C	SP P
COR	75.500	47.08	5.55	30.58	I	C	SP P
LON	75.514	44.60	5.55	30.57	I	C	LP P
SNZO	76.467	153.48	5.48	30.17	E	D	LP P
WDC	77.758	50.53	5.40	29.63	I	C	SP P
YKM	78.185	40.73	5.36	29.38	I	C	SP P
MIN	78.500	50.42	5.31	29.13	I	C	SP P
RXF	78.521	40.53	5.31	29.12	I	C	SP P
LHD	78.571	41.21	5.31	29.09	I	C	SP P
CLX	78.842	41.11	5.29	28.97	I	C	SP P
SAO	80.263	53.58	5.17	28.25	I	C	SP P
JAS	80.417	52.14	5.16	28.20	I	C	LP P
FRI	81.382	52.71	5.10	27.85	I	C	SP P
MNA	81.758	50.84	5.08	27.71	I	C	SP P
GDH	82.346	4.66	5.04	27.50	E	C	LP P
ANTO	83.982	312.17	4.94	26.94	I	D	LP P
RSSD	87.514	40.21	4.72	25.63	E	C	LP P
BRG	87.785	328.95	4.71	25.58	I	D	SP P
CLL	87.904	329.68	4.71	25.57	I	D	SP P
ZST	88.106	325.59	4.71	25.56	I	D	SP P
RSON	88.335	30.53	4.71	25.58	E	C	LP P
VTS	88.378	318.54	4.71	25.58	I	D	SP P
VKA	88.449	325.99	4.71	25.57	I	D	SP P
SOP	88.721	325.45	4.71	25.55	I	D	SP P
WET	89.489	328.20	4.69	25.45	I	D	SP P
GRFO	89.859	329.36	4.68	25.41	I	D	LP P

Table 107. Station data for event 140 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ARO	90.411	283.23	4.67	25.35	I	D	SP	P
BHG	90.496	327.19	4.67	25.34	I	D	SP	P
KBA	90.724	326.51	4.66	25.29	I	D	SP	P
ATH	90.882	314.63	4.66	25.25	I	D	SP	P
STU	91.436	329.70	4.64	25.17	E	D	LP	P
STU	91.436	329.70	4.64	25.17	I	D	SP	P
ANMO	91.537	48.65	4.64	25.15	I	C	LP	P
GWF	91.974	330.61	4.62	25.06	I	D	SP	P
OGA	91.989	327.50	4.62	25.05	I	D	SP	P
CDF	92.551	330.41	4.61	24.98	I	D	SP	P
BSF	93.203	330.28	4.58	24.83	I	D	SP	P
HAU	93.264	330.62	4.58	24.81	I	D	SP	P
LOR	94.899	331.46	4.53	24.54	I	D	SP	P
SSF	95.210	331.53	4.53	24.52	I	D	SP	P
SMF	95.396	331.09	4.53	24.53	I	D	SP	P
FLN	95.431	334.71	4.53	24.53	I	D	SP	P
AVF	95.489	331.44	4.53	24.53	I	D	SP	P
GRR	95.881	334.70	4.52	24.49	I	D	SP	P
GAC	99.844	24.08	4.44	24.00	E	C	LP	P
BLA	104.883	32.03	4.44	24.00	E	C	LP	P
SLR	119.441	254.87	1.87	9.88	I	D	SP	PKP
SJG	127.664	31.37	1.86	9.80	I	D	SP	PKP
BOG	134.031	50.09	1.82	9.62	E	C	LP	PKP
LPB	152.001	71.32	1.48	7.79	E	D	LP	PKP
RDJ	174.137	25.65	0.36	1.90	I	D	SP	PKP

Table 108. Station data for event 142.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
HJJ	3.215	13.00	8.26	134.12	I	D	SP P
SHJ	4.398	323.01	9.66	122.90	I	C	SP P
HMM	4.841	348.16	10.02	119.41	I	D	SP P
AJI	5.068	1.58	10.18	117.70	I	D	SP P
MIS	5.135	0.03	10.23	117.22	I	D	SP P
MRT	5.210	310.18	10.28	116.68	I	C	SP P
WKY	5.315	324.08	10.34	115.94	I	C	SP P
KYS	5.321	10.85	10.34	115.90	I	D	SP P
OYM	5.449	2.72	10.42	115.02	I	D	SP P
NAG	5.445	342.83	10.42	115.04	I	C	SP P
TKS	5.512	319.03	10.46	114.59	I	C	SP P
IID	5.608	350.84	10.51	113.93	I	C	SP P
SRY	5.638	2.88	10.53	113.73	I	D	SP P
GIF	5.719	341.98	10.57	113.20	I	C	SP P
ASZ	5.753	300.01	10.59	112.99	I	C	SP P
KOC	5.821	309.33	10.62	112.55	I	C	SP P
DDR	6.023	2.06	10.72	111.26	I	D	SP P
TSK	6.310	8.74	10.84	109.51	I	D	SP P
FUK	6.483	340.24	10.91	108.47	I	C	SP P
MAT	6.589	354.95	10.95	107.85	I	C	SP P
MYZ	6.731	288.72	11.00	107.02	I	C	SP P
KAN	6.838	344.40	11.03	106.40	I	C	SP P
TAJ	6.894	278.38	11.05	106.08	I	C	SP P
SHK	6.983	312.33	11.08	105.58	I	D	SP P
OIT	7.032	299.49	11.09	105.31	I	C	SP P
ASJ	7.313	295.42	11.17	103.84	I	D	SP P
WAJ	7.598	347.69	11.23	102.39	I	C	SP P
AIK	8.057	356.14	11.32	100.19	I	C	SP P
FKK	8.121	298.55	11.33	99.90	I	D	SP P
YAM	8.354	7.73	11.36	98.92	I	C	SP P
NZJ	8.394	261.47	11.37	98.75	I	C	SP P
OFU	9.364	13.48	11.46	94.49	I	C	SP P
MRK	9.884	10.13	11.46	85.46	I	C	SP P
MIY	9.977	13.68	11.46	85.11	I	C	SP P
HAC	10.750	10.68	11.35	80.65	I	C	SP P
AOM	10.935	7.45	11.30	79.37	I	C	SP P
MRR	12.439	7.10	10.95	72.27	I	C	SP P
SEO	12.504	310.48	10.93	71.95	I	D	LP P
SUT	12.845	4.35	10.83	70.35	I	C	SP P
OBI	13.382	13.75	10.71	68.64	I	C	SP P
ASA	14.052	10.33	10.57	66.83	I	C	SP P
RMJ	14.126	8.03	10.56	66.63	I	C	SP P
NEM	14.363	19.95	10.51	66.02	I	C	SP P
SSE	15.334	278.70	10.33	63.93	I	D	LP P
WAK	15.578	7.22	10.28	63.41	I	C	SP P
ANP	16.152	257.05	10.17	62.16	I	D	LP P
MDJ	16.387	335.75	10.13	61.71	I	D	SP P
DL2	16.810	306.65	10.05	60.90	I	D	SP P
SNY	17.140	317.83	9.99	60.32	I	D	SP P
GUA	17.255	160.01	9.97	60.13	E	D	LP P

Table 108. Station data for event 142 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
NJ2	17.336	282.00	9.96	60.00	I	D	SP P
CN2	17.489	325.83	9.93	59.76	I	D	SP P
QZH	18.721	259.40	9.75	57.97	I	D	SP P
SZP	20.902	237.92	9.48	55.50	I	D	SP P
BJI	21.125	304.52	9.45	55.30	I	D	LP P
WHN	21.233	277.77	9.45	55.22	I	D	SP P
BAG	21.553	235.33	9.42	55.01	I	D	LP P
TIY	23.273	296.43	9.28	53.76	I	D	SP P
GZH	23.863	259.41	9.22	53.29	I	D	SP P
HHC	24.713	303.48	9.13	52.54	I	D	SP P
XAN	25.724	286.90	8.99	51.43	I	D	SP P
BTO	25.770	302.14	8.98	51.37	I	D	SP P
DAV	25.985	211.54	8.96	51.17	I	D	LP P
QIZ	28.539	254.27	8.75	49.55	I	D	SP P
LZH	29.933	291.08	8.67	48.91	I	D	SP P
CD2	30.266	280.80	8.65	48.76	I	D	SP P
KMI	32.360	270.31	8.52	47.82	I	D	SP P
GTA	33.298	297.09	8.47	47.45	I	D	SP P
SMY	34.328	38.41	8.41	47.02	I	C	SP P
RAB	36.247	157.27	8.30	46.21	E	D	LP P
CHTO	37.896	262.28	8.22	45.61	I	D	SP P
CHTO	37.896	262.28	8.22	45.61	E	D	LP P
NST	38.285	256.93	8.19	45.45	I	D	SP P
BDT	38.522	259.97	8.18	45.35	I	D	SP P
ADK	39.258	43.25	8.14	45.09	I	C	SP P
MKS	39.641	211.33	8.13	44.95	I	D	SP P
LSA	41.208	282.02	8.04	44.36	I	D	SP P
WMQ	42.596	303.50	7.97	43.86	I	D	SP P
IPM	43.778	242.26	7.90	43.37	I	D	SP P
TRT	45.172	218.24	7.81	42.80	I	D	SP P
KNA	46.483	193.55	7.71	42.13	I	D	SP P
PKI	46.624	280.88	7.70	42.07	I	D	SP P
KKN	46.673	281.22	7.70	42.04	I	D	SP P
DMN	46.871	281.04	7.69	41.98	I	D	SP P
SDN	49.356	40.98	7.49	40.66	I	C	SP P
WB2	49.804	185.64	7.47	40.48	I	D	SP P
CTA	50.250	171.03	7.43	40.27	I	D	LP P
KSH	51.681	298.49	7.32	39.53	I	D	SP P
TTA	52.467	31.55	7.26	39.12	I	C	SP P
NDJ	53.231	285.01	7.21	38.80	I	D	SP P
BRW	53.732	21.13	7.17	38.55	I	C	SP P
IMA	53.864	27.80	7.16	38.52	I	C	SP P
KDC	53.892	38.17	7.16	38.51	I	C	SP P
MBL	54.040	202.16	7.15	38.44	I	D	SP P
PMR	55.598	33.44	7.03	37.71	I	C	SP P
HYB	56.126	271.63	6.99	37.46	I	D	SP P
COL	56.229	29.44	6.99	37.42	I	C	LP P
COL	56.229	29.44	6.99	37.42	I	C	SP P
FBA	56.229	29.44	6.99	37.42	I	C	SP P
NAU	56.850	206.04	6.94	37.14	I	D	SP P

Table 108. Station data for event 142 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
HON	56.899	82.88	6.94	37.12	I	C	LP	P
WBN	57.017	193.25	6.93	37.06	I	D	SP	P
PNL	60.538	35.23	6.66	35.39	I	C	SP	P
CMS	61.453	173.29	6.59	34.94	I	D	SP	P
STK	61.548	177.42	6.58	34.89	I	D	SP	P
INK	61.641	24.97	6.57	34.85	I	C	SP	P
MRWA	62.776	202.52	6.48	34.30	I	D	SP	P
SIT	63.176	37.64	6.45	34.10	I	C	SP	P
MBC	63.882	15.13	6.39	33.76	I	C	SP	P
KLB	64.426	199.98	6.35	33.50	I	D	SP	P
AFI	64.473	125.34	6.34	33.48	E	C	LP	P
YOU	64.507	171.33	6.34	33.47	I	D	SP	P
ADE	64.573	180.20	6.34	33.43	I	D	SP	P
MHI	65.077	298.87	6.30	33.19	I	D	LP	P
CAN	65.615	170.97	6.25	32.94	I	D	SP	P
NWAO	65.828	199.92	6.24	32.84	I	D	SP	P
NWAO	65.828	199.92	6.24	32.84	I	D	LP	P
WAM	66.458	171.22	6.19	32.54	I	D	SP	P
KHI	66.484	296.93	6.18	32.53	I	D	SP	P
RKG	66.961	199.68	6.15	32.30	I	D	SP	P
KBS	67.271	350.35	6.12	32.15	I	D	SP	P
ALE	67.275	2.96	6.12	32.15	I	C	SP	P
KBS	67.271	350.35	6.12	32.15	E	C	LP	P
KEV	69.331	339.81	5.97	31.30	I	D	LP	P
PHC	69.611	42.61	5.95	31.18	I	C	SP	P
YKC	71.048	28.08	5.86	30.63	I	C	SP	P
TRO	71.733	341.38	5.81	30.33	I	D	SP	P
KJF	71.984	334.59	5.79	30.25	I	D	LP	P
DAG	72.632	354.74	5.75	30.01	I	C	SP	P
SUF	73.376	333.68	5.70	29.71	I	D	SP	P
TAB	74.100	304.93	5.65	29.45	I	D	LP	P
LON	74.654	44.73	5.61	29.20	I	C	LP	P
COR	74.710	47.23	5.61	29.18	I	C	SP	P
NUR	75.216	332.19	5.58	29.03	I	D	LP	P
FHC	75.991	50.94	5.53	28.75	I	C	SP	P
EDM	76.226	36.14	5.52	28.67	I	C	SP	P
NEW	76.716	41.79	5.49	28.51	I	C	SP	P
WDC	77.066	50.61	5.47	28.39	I	C	SP	P
RXF	77.550	40.56	5.43	28.17	I	C	SP	P
LHD	77.618	41.25	5.42	28.14	I	C	SP	P
MIN	77.805	50.48	5.42	28.10	I	C	SP	P
CLX	77.886	41.14	5.41	28.07	I	C	SP	P
SNZO	78.244	153.26	5.38	27.87	E	D	LP	P
ORV	78.258	51.14	5.37	27.84	I	C	SP	P
UPP	78.385	333.88	5.35	27.75	I	D	SP	P
BRK	78.552	52.93	5.34	27.65	I	C	SP	P
PCC	78.648	53.32	5.33	27.59	I	C	SP	P
SES	78.963	37.79	5.30	27.42	I	C	SP	P
GCC	79.145	53.58	5.28	27.33	I	C	SP	P
MHC	79.240	53.16	5.27	27.28	I	C	SP	P

Table 108. Station data for event 142 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
HFS	79.659	335.44	5.24	27.09	I	D	SP P
JAS	79.771	52.15	5.22	27.01	I	C	LP P
JAS1	79.794	52.16	5.22	27.00	I	C	SP P
PRS	79.926	53.95	5.21	26.93	I	C	SP P
LLA	80.083	53.52	5.20	26.86	I	C	SP P
PRI	80.515	53.82	5.17	26.72	I	C	SP P
GDH	80.668	4.47	5.16	26.66	I	D	SP P
FRI	80.753	52.69	5.16	26.64	I	C	SP P
FFC	80.802	30.90	5.15	26.62	I	C	SP P
MNA	81.074	50.80	5.14	26.53	I	C	SP P
HYA	81.432	338.89	5.12	26.42	I	D	SP P
KONO	81.452	336.59	5.11	26.41	I	D	SP P
WAR	81.835	326.70	5.09	26.28	I	D	LP P
CFR	82.326	318.14	5.06	26.12	I	D	SP P
ANTO	82.439	311.77	5.06	26.08	I	D	LP P
TLB	82.738	317.70	5.04	25.98	I	D	SP P
PSN	83.172	316.89	5.01	25.83	I	D	SP P
COP	83.275	332.71	5.00	25.80	I	D	LP P
MLR	83.412	319.31	5.00	25.75	I	D	SP P
KRA	83.759	325.44	4.98	25.65	I	D	SP P
BUCK	83.965	318.38	4.96	25.57	I	D	SP P
MUD	83.966	334.58	4.96	25.57	I	D	SP P
BUC1	84.043	318.35	4.96	25.53	I	D	SP P
BDW	84.151	43.53	4.95	25.47	I	C	SP P
SPC	84.167	324.65	4.94	25.46	I	D	SP P
ADI	84.419	304.95	4.91	25.28	I	D	SP P
JOS	84.464	323.99	4.91	25.25	I	D	SP P
KSP	84.983	327.59	4.86	25.02	I	D	SP P
PVL	85.260	317.76	4.85	24.92	I	D	SP P
BRN	85.277	330.07	4.84	24.91	I	D	SP P
EDC	85.298	314.30	4.84	24.91	I	D	SP P
HAM	85.892	332.23	4.81	24.72	I	D	SP P
BUD	85.896	323.88	4.81	24.71	I	D	SP P
SRO	86.039	324.44	4.80	24.67	I	D	SP P
BRG	86.038	328.64	4.80	24.67	I	D	SP P
KDZ	86.063	316.48	4.80	24.66	I	D	SP P
CLL	86.151	329.37	4.79	24.63	I	D	SP P
ZST	86.388	325.27	4.78	24.54	I	D	SP P
PRU	86.385	327.74	4.78	24.55	I	D	SP P
RSSD	86.531	40.00	4.77	24.50	I	C	LP P
VKA	86.727	325.68	4.76	24.46	I	D	SP P
SOP	87.004	325.14	4.75	24.40	I	D	SP P
RSON	87.111	30.29	4.75	24.38	I	C	LP P
HOF	87.364	329.18	4.74	24.32	I	D	SP P
KHC	87.434	327.56	4.73	24.30	I	D	SP P
SRS	87.430	316.87	4.73	24.30	I	D	SP P
WET	87.747	327.90	4.72	24.23	I	D	SP P
KNT	87.813	317.23	4.72	24.21	I	D	SP P
VAY	87.906	317.51	4.71	24.20	I	D	SP P
THE	88.104	316.79	4.71	24.17	I	D	SP P

Table 108. Station data for event 142 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality	Direction, and Source of Earth Motion		
GRFO	88.109	329.06	4.71	24.17	I	D	LP	P
PAIG	88.114	315.90	4.71	24.17	I	D	SP	P
SKO	88.150	318.55	4.71	24.17	I	D	SP	P
GRG	88.234	317.31	4.71	24.17	I	D	SP	P
WTS	88.248	332.68	4.71	24.17	I	D	SP	P
ESY	88.397	339.49	4.71	24.18	I	D	SP	P
EAB	88.680	340.46	4.71	24.16	I	D	SP	P
EAU	88.712	339.85	4.71	24.16	I	D	SP	P
LIT	88.719	316.60	4.71	24.16	I	D	SP	P
BHG	88.763	326.90	4.70	24.14	I	D	SP	P
DBN	88.808	333.53	4.70	24.14	I	D	LP	P
BNS	88.890	331.84	4.70	24.13	I	D	SP	P
HLW	88.952	304.08	4.70	24.13	I	D	SP	P
KBA	88.997	326.22	4.70	24.12	I	D	SP	P
FUR	89.192	327.98	4.70	24.12	I	D	SP	P
ATH	89.300	314.35	4.70	24.13	I	D	SP	P
ENN	89.550	332.32	4.70	24.12	I	D	SP	P
STU	89.683	329.41	4.70	24.11	I	D	LP	P
TRI	89.759	325.05	4.70	24.11	I	D	SP	P
UCC	90.147	333.12	4.69	24.05	E	D	LP	P
GWF	90.214	330.33	4.68	24.03	I	D	SP	P
OGA	90.253	327.22	4.68	24.01	I	D	SP	P
CTI	90.551	326.34	4.67	23.96	I	D	SP	P
ALQ	90.787	48.33	4.66	23.93	I	C	SP	P
ANMO	90.785	48.33	4.66	23.93	I	C	LP	P
CDF	90.793	330.14	4.66	23.93	I	D	SP	P
BSF	91.446	330.01	4.65	23.86	I	D	SP	P
HAU	91.504	330.35	4.65	23.85	I	D	SP	P
ORO	92.592	327.95	4.62	23.68	I	D	SP	P
LOR	93.134	331.20	4.59	23.55	I	D	SP	P
LBF	93.308	330.96	4.59	23.52	I	D	SP	P
GRC	93.438	331.64	4.58	23.49	I	D	SP	P
SSF	93.445	331.26	4.58	23.49	I	D	SP	P
SMF	93.633	330.83	4.58	23.45	I	D	SP	P
FLN	93.647	334.44	4.58	23.44	I	D	SP	P
LDF	93.651	334.15	4.58	23.44	I	D	SP	P
AVF	93.724	331.18	4.57	23.43	I	D	SP	P
GRR	94.098	334.44	4.56	23.35	I	D	SP	P
BGF	94.120	331.32	4.56	23.35	I	D	SP	P
LPF	94.462	334.34	4.55	23.31	I	D	SP	P
MZF	94.503	331.26	4.55	23.31	I	D	SP	P
TCF	94.600	331.51	4.55	23.30	I	D	SP	P
FRF	94.780	327.33	4.54	23.28	I	D	SP	P
LSF	94.911	331.87	4.54	23.26	I	D	SP	P
LSF	94.911	331.87	4.54	23.26	I	D	SP	P
LRG	94.995	327.42	4.54	23.25	I	D	SP	P
LMR	95.018	327.26	4.54	23.25	I	D	SP	P
RJF	95.680	331.32	4.53	23.18	I	D	SP	P
CAF	95.755	330.78	4.52	23.17	I	D	SP	P
LTX	96.125	51.23	4.52	23.13	I	C	SP	P

Table 108. Station data for event 142 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
LPO	96.320	331.14	4.51	23.11	I	D	SP P
TUL	96.710	41.86	4.51	23.07	I	C	LP P
JCT	97.944	48.16	4.47	22.88	E	C	LP P
GAC	98.477	23.60	4.46	22.83	I	C	LP P
RSNY	99.813	23.58	4.44	22.71	I	C	LP P
WES	102.816	22.51	4.44	22.71	E	C	LP P
BLA	103.690	31.40	4.44	22.71	E	C	LP P
SPA	119.791	180.00	1.87	9.37	I	D	SP PKP
BFS	121.041	254.90	1.87	9.37	I	D	SP PKP
RDJ	172.704	15.81	0.45	2.24	I	D	SP PKP

Table 109. Station data for event 180.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
GUA	5.162	62.22	14.15	56.13	I	D	LP P
WEW	15.000	166.74	12.97	49.56	I	D	SP P
AAI	18.986	219.71	12.18	45.62	I	D	SP P
BAG	19.768	287.51	10.46	37.86	I	C	LP P
LMG	21.435	158.09	10.06	36.18	I	D	SP P
PMG	21.560	161.08	10.06	36.18	I	C	SP P
ANP	22.547	310.75	9.86	35.35	I	C	LP P
QZH	24.660	306.69	9.54	34.04	I	C	SP P
MAT	25.337	356.22	9.43	33.60	I	C	SP P
SSE	26.539	321.24	9.33	33.19	I	C	SP P
GZH	28.231	298.36	9.19	32.63	I	C	SP P
QIZ	30.316	288.62	8.86	31.32	I	C	SP P
WRA	31.436	190.64	8.79	31.05	I	C	SP P
CTAO	31.606	169.13	8.79	31.05	I	C	LP P
CTA	31.606	169.13	8.79	31.05	I	C	SP P
CTA	31.606	169.13	8.79	31.05	I	C	LP P
SNY	33.853	337.41	8.62	30.38	I	C	SP P
ASPA	35.150	190.09	8.56	30.15	I	C	SP P
BJI	35.783	327.66	8.50	29.92	E	C	LP P
TIY	36.325	321.38	8.47	29.80	I	C	SP P
XAN	36.539	313.57	8.47	29.80	I	C	SP P
KMI	38.081	296.59	8.38	29.45	I	C	SP P
KMI	38.081	296.59	8.38	29.45	I	C	LP P
CD2	39.046	305.82	8.32	29.22	I	C	SP P
PVC	39.925	135.63	8.27	29.03	I	C	SP P
BRS	40.202	162.57	8.27	29.03	I	C	SP P
CHTO	40.513	285.87	8.24	28.91	I	C	LP P
NOU	42.042	142.32	8.16	28.61	I	C	SP P
GTA	45.532	315.28	7.97	27.88	I	C	SP P
YOU	45.837	170.56	7.94	27.77	I	C	SP P
CAN	46.958	170.16	7.88	27.54	I	C	SP P
VUN	47.593	127.07	7.85	27.43	I	C	SP P
WAM	47.791	170.53	7.82	27.31	I	C	SP P
MUN	48.654	207.43	7.79	27.20	I	C	SP P
NWAO	49.012	205.79	7.74	27.01	I	C	SP P
NWAO	49.012	205.79	7.74	27.01	I	C	LP P
TAU	54.186	173.57	7.34	25.51	E	C	LP P
WMQ	55.608	315.88	7.22	25.06	I	C	SP P
HON	59.853	71.81	6.88	23.81	E	C	LP P
SNZO	61.117	150.84	6.80	23.52	I	C	LP P
POO	64.280	285.24	6.52	22.49	I	C	SP P
COL	72.346	25.20	5.89	20.22	E	C	LP P
COR	86.830	45.33	4.83	16.46	I	D	SP P
RSNT	87.092	26.67	4.83	16.46	E	C	LP P
LON	87.368	42.98	4.80	16.36	I	C	LP P
KEV	87.390	341.32	4.80	16.36	I	C	LP P
BKS	89.113	51.69	4.73	16.11	I	C	SP P
SBA	90.105	174.57	4.71	16.04	I	C	LP P
SBA	90.105	174.57	4.71	16.04	I	C	SP P
JAS	90.476	51.28	4.70	16.01	E	C	LP P

Table 109. Station data for event 180 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
DAG	91.376	355.26	4.68	15.94	I	C	SP	P
NUR	92.439	333.46	4.66	15.87	E	C	LP	P
ANTO	95.939	312.41	4.55	15.48	E	C	LP	P
KONO	99.144	337.02	4.48	15.24	E	C	LP	P
COP	100.496	332.92	4.45	15.14	E	C	LP	Fdf
CLL	102.883	329.15	4.45	15.14	I	D	SP	Pdf
STU	106.382	328.65	1.89	6.37	E	C	LP	PKP
WES	119.383	26.41	1.88	6.32	E	C	LP	PKP
UPA	135.690	64.73	1.81	6.11	E	C	LP	PKP
SJG	140.975	42.13	1.75	5.91	E	C	LP	PKP
BOG	142.456	67.13	1.74	5.86	I	C	LP	PKP
SAN	144.060	133.02	1.70	5.74	I	D	SP	PKP
PCH	144.080	133.38	1.70	5.74	I	C	SP	PKP
TCA	149.509	134.96	1.56	5.25	I	C	SP	PKP
GUV	150.117	51.92	1.56	5.25	I	C	SP	PKP
LPB	152.010	104.21	1.50	5.04	I	C	LP	PKP

Table 110. Station data for event 188.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
TSK	8.978	1.36	10.56	94.77	I	C	SP	P
SHK	9.549	321.60	10.59	91.39	I	D	SP	P
GUA	14.400	159.81	10.14	73.14	I	C	LP	P
SEO	14.987	316.76	10.06	71.67	E	D	LP	P
ANP	16.578	267.13	9.84	68.18	I	D	LP	P
SSE	16.755	287.79	9.81	67.80	I	D	LP	P
BJI	23.420	309.14	9.15	59.70	E	D	LP	P
CGP	23.530	220.37	9.13	59.56	I	C	SP	P
LZH	31.758	295.22	8.50	53.38	I	D	SP	P
KMI	33.295	274.94	8.42	52.64	I	D	LP	P
CHG	38.429	266.30	8.14	50.22	I	D	LP	P
NST	38.554	260.96	8.14	50.17	I	D	SP	P
BDT	38.940	263.94	8.11	49.97	I	D	SP	P
ADK	40.755	40.79	8.02	49.20	I	C	SP	P
SNG	42.186	249.15	7.94	48.55	I	D	LP	P
TRT	43.577	221.11	7.86	47.93	I	D	SP	P
PSI	46.097	245.25	7.69	46.55	I	D	SP	P
CTAO	47.417	171.81	7.60	45.80	E	N	LP	P
ISQ	47.633	180.37	7.58	45.68	I	C	SP	P
PKI	47.999	283.64	7.55	45.44	I	D	SP	P
KKN	48.062	283.96	7.54	45.40	I	D	SP	P
DMN	48.252	283.77	7.53	45.29	I	D	SP	P
SDN	50.929	39.43	7.32	43.74	I	C	SP	P
KOU	53.051	150.99	7.17	42.56	I	C	SP	P
TTA	54.403	30.42	7.08	41.90	I	C	SP	P
NDI	54.770	287.20	7.05	41.69	I	D	SP	P
NOU	55.538	149.80	7.00	41.33	I	C	SP	P
KDC	55.573	36.97	6.99	41.31	I	C	SP	P
IMA	55.930	26.85	6.96	41.10	I	C	SP	P
BRW	56.011	20.36	6.96	41.05	I	C	SP	P
HON	56.470	81.46	6.92	40.79	E	C	LP	P
HYB	57.066	273.85	6.88	40.53	I	D	SP	P
PMR	57.461	32.45	6.85	40.30	I	C	SP	P
COL	58.236	28.57	6.79	39.86	I	C	SP	P
KOD	60.879	266.70	6.59	38.46	I	D	SP	P
QUE	62.983	291.72	6.42	37.30	I	D	SP	P
INK	63.795	24.44	6.36	36.86	I	C	SP	P
MBC	66.323	14.88	6.15	35.50	I	C	SP	P
ALE	69.973	3.03	5.90	33.85	I	D	SP	P
TAU	70.099	174.17	5.89	33.79	I	D	SP	P
KBS	70.110	350.66	5.89	33.78	I	D	SP	P
KEV	72.186	340.31	5.75	32.86	E	D	LP	P
RSNT	73.041	27.90	5.69	32.46	E	C	LP	P
TRO	74.592	341.84	5.59	31.87	I	D	SP	P
DAG	75.437	355.02	5.54	31.55	I	D	SP	P
LON	76.038	44.52	5.51	31.32	E	C	LP	P
EDM	77.966	36.06	5.35	30.34	I	C	SP	P
WDC	78.185	50.47	5.33	30.21	I	C	SP	P
YKM	78.769	40.70	5.27	29.84	I	C	SP	P
MIN	78.929	50.37	5.26	29.74	I	C	SP	P

Table 110. Station data for event 188 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
LHD	79.148	41.19	5.24	29.62	I	C	SP	P
LDM	79.195	40.94	5.23	29.60	I	C	SP	P
ORV	79.350	51.06	5.22	29.53	I	C	SP	P
CLX	79.421	41.09	5.22	29.49	I	C	SP	P
BHD	79.790	302.07	5.19	29.30	I	C	SP	P
SES	80.635	37.81	5.13	28.98	I	C	SP	P
JAS	80.816	52.13	5.13	28.95	E	C	LP	P
JAS1	80.838	52.14	5.13	28.94	I	C	SP	P
UPP	81.207	334.40	5.11	28.83	I	D	SP	P
FRI	81.771	52.72	5.07	28.61	I	C	SP	P
HRY	82.111	41.26	5.05	28.49	I	C	SP	P
FFC	82.737	31.03	5.01	28.23	I	C	SP	P
RTB	82.955	303.41	4.99	28.12	I	C	SP	P
CLC	83.827	52.94	4.93	27.76	I	C	LP	P
SBB	84.210	54.02	4.90	27.54	I	C	LP	P
KONO	84.293	337.07	4.89	27.47	E	D	LP	P
PPE	84.652	319.79	4.86	27.29	I	C	SP	P
CLI	84.655	320.20	4.86	27.29	I	D	SP	P
ANTO	84.879	312.37	4.85	27.23	E	D	LP	P
CFR	84.916	318.72	4.84	27.21	I	C	SP	P
TLB	85.319	318.27	4.82	27.06	I	D	SP	P
BRD	85.373	319.43	4.82	27.04	I	D	SP	P
PLM	85.559	54.79	4.81	26.98	I	C	LP	P
ISR	85.882	319.32	4.79	26.85	I	C	SP	P
MLR	86.026	319.86	4.78	26.81	I	D	SP	P
BAR	86.030	55.30	4.78	26.81	I	C	LP	P
COP	86.087	333.20	4.78	26.79	I	C	SP	P
MUD	86.794	335.06	4.75	26.62	I	C	SP	P
COZ	87.040	320.38	4.74	26.56	I	C	SP	P
GLA	87.185	54.19	4.73	26.53	I	C	SP	P
KSP	87.736	328.07	4.71	26.42	I	D	SP	P
PVL	87.841	318.27	4.71	26.41	I	D	SP	P
KDZ	88.616	316.98	4.70	26.33	I	D	SP	P
BRG	88.805	329.11	4.70	26.34	I	D	SP	P
CLL	88.927	329.84	4.70	26.34	I	D	SP	P
RSON	89.065	30.66	4.70	26.33	E	C	LP	P
ZST	89.108	325.75	4.70	26.33	I	D	SP	P
VTS	89.331	318.70	4.69	26.29	I	D	SP	P
MMB	89.626	317.65	4.69	26.26	I	D	SP	P
SOP	89.722	325.61	4.69	26.25	I	D	SP	P
HOF	90.138	329.64	4.68	26.19	I	D	SP	P
VAY	90.481	317.97	4.66	26.10	I	D	SP	P
WET	90.505	328.35	4.66	26.09	I	D	SP	P
SKO	90.748	319.00	4.65	26.06	I	D	SP	P
GRFO	90.881	329.51	4.65	26.05	E	D	LP	P
ESY	91.251	339.93	4.65	26.01	I	D	SP	P
DBN	91.626	333.97	4.64	25.95	E	C	LP	P
KBA	91.731	326.66	4.63	25.92	I	C	SP	P
FUR	91.950	328.41	4.62	25.86	I	C	SP	P
ANMO	91.993	48.83	4.62	25.85	E	C	LP	P

Table 110. Station data for event 188 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
VOY	92.187	325.64	4.61	25.81	I	D	SP	P
OGA	93.001	327.63	4.59	25.67	I	D	SP	P
ETA	95.104	340.05	4.53	25.30	I	C	SP	P
ECP	95.600	339.87	4.52	25.24	I	C	SP	P
GRC	96.239	332.03	4.51	25.16	I	D	SP	P
CDR	97.858	328.25	4.46	24.92	I	C	SP	P
MNT	101.495	23.32	4.44	24.78	I	D	SP	Pdf
NAI	102.182	274.87	4.44	24.78	E	D	LP	Pdf
MTD	113.444	262.55	1.88	10.24	I	D	SP	PKP
BNG	115.241	289.64	1.88	10.22	I	C	SP	PKP
BUL	117.306	260.28	1.88	10.20	I	D	SP	PKP
PRY	120.498	253.37	1.87	10.18	I	C	SP	PKP
SEK	120.769	251.78	1.87	10.17	I	C	SP	PKP
BFS	121.077	253.61	1.87	10.17	I	C	SP	PKP
CER	128.888	247.81	1.85	10.07	I	C	SP	PKP
TUH	128.995	247.92	1.85	10.07	I	C	SP	PKP
GUV	138.703	35.83	1.78	9.65	I	D	SP	PKP

Table 111. Station data for event 214.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
GUA	9.675	52.63	13.76	53.95	E	C	LP P
DAV	11.366	267.59	13.51	52.55	E	D	LP P
BAG	18.237	299.78	12.38	46.67	E	D	LP P
RAB	19.194	127.54	12.17	45.65	I	D	LP P
PMG	19.781	149.13	10.44	37.84	I	D	SP P
PMG	19.781	149.13	10.44	37.84	I	D	LP P
MKS	21.715	234.25	10.05	36.20	I	C	SP P
ANP	22.817	321.36	9.76	34.99	I	C	LP P
PAA	23.094	126.58	9.76	34.99	I	C	SP P
HKC	26.344	305.88	9.33	33.25	E	C	LP P
SHK	26.981	352.08	9.28	33.04	I	C	LP P
SSE	27.564	329.62	9.23	32.84	E	C	LP P
HNR	28.493	126.32	9.11	32.36	E	C	LP P
MAJO	28.709	2.00	9.11	32.36	I	C	LP P
MAT	28.709	2.00	9.11	32.36	I	C	SP P
CTA	29.083	161.92	9.04	32.09	I	D	SP P
CTAO	29.083	161.92	9.04	32.09	I	D	LP P
CTA	29.083	161.92	9.04	32.09	I	D	LP P
SEO	31.080	344.42	8.82	31.22	I	C	LP P
ASPA	31.335	185.50	8.79	31.10	I	C	SP P
NST	36.927	285.77	8.44	29.73	I	C	SP P
KMI	36.996	301.96	8.44	29.73	I	C	SP P
KMI	36.996	301.96	8.44	29.73	I	C	LP P
BJI	37.196	333.14	8.44	29.73	I	C	LP P
BJI	37.196	333.14	8.44	29.73	I	C	SP P
TIY	37.249	326.97	8.44	29.73	I	C	SP P
MDJ	37.319	351.24	8.41	29.62	I	C	SP P
CN2	37.339	346.15	8.41	29.62	I	C	SP P
CHTO	38.577	290.48	8.35	29.38	I	C	LP P
CHG	38.577	290.48	8.35	29.38	I	C	SP P
CHTO	38.577	290.48	8.35	29.38	I	C	SP P
CD2	38.696	311.06	8.35	29.38	I	C	SP P
KOU	38.832	136.80	8.32	29.27	I	C	SP P
HHC	40.023	329.53	8.27	29.07	I	D	SP P
BTO	40.633	327.94	8.24	28.96	I	C	SP P
NOU	41.496	136.62	8.18	28.73	I	C	SP P
MUN	44.188	205.67	8.05	28.23	E	C	LP P
GTA	45.901	319.28	7.94	27.81	I	C	SP P
LSA	48.227	303.14	7.81	27.32	I	C	SP P
PKI	52.571	298.81	7.46	26.00	I	C	SP P
KKN	52.728	299.05	7.46	26.00	I	C	SP P
DMN	52.842	298.79	7.42	25.85	I	C	SP P
HYB	57.686	285.66	7.07	24.55	I	C	SP P
NDI	59.887	298.61	6.88	23.85	I	C	SP P
HON	63.952	70.11	6.56	22.67	I	C	LP P
QUE	68.945	299.28	6.14	21.15	I	C	LP P
QUE	68.945	299.28	6.14	21.15	I	C	SP P
COL	76.779	25.07	5.58	19.14	I	C	LP P
INK	82.688	22.02	5.14	17.58	I	C	SP P
KBS	88.820	350.89	4.73	16.14	E	C	LP P

Table 111. Station data for event 214 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KEV	89.601	340.91	4.71	16.07	I	C	LP	P
RSNT	91.556	26.17	4.68	15.96	I	C	LP	P
BKS	93.711	51.18	4.63	15.79	E	C	LP	P
DAG	94.499	354.56	4.60	15.68	I	C	SP	P
JAS	95.078	50.79	4.58	15.61	E	C	LP	P
ANTO	95.871	311.41	4.55	15.51	E	C	LP	P
IST	98.320	313.37	4.49	15.30	I	C	LP	P
NAI	100.291	270.10	4.45	15.16	E	C	LP	Pdf
COP	102.048	331.52	4.45	15.16	E	C	LP	Pdf
KHC	104.964	325.43	4.45	15.16	I	C	SP	Pdf
SLR	110.165	245.50	1.89	6.38	E	C	LP	PKP
VAL	114.293	338.45	1.88	6.36	E	C	LP	PKP
PTO	122.035	329.79	1.87	6.31	E	C	LP	PKP
SHA	122.294	46.27	1.87	6.31	I	C	LP	PKP
BLA	123.228	35.47	1.87	6.31	E	C	LP	PKP
UPA	139.981	66.20	1.77	5.96	I	C	SP	PKP
UPA	139.981	66.20	1.77	5.96	I	C	LP	PKP
SAN	143.799	138.88	1.70	5.75	I	C	SP	PKP
BACH	143.973	138.90	1.70	5.75	I	D	SP	PKP
PEL	143.976	138.45	1.70	5.75	I	C	SP	PKP
SJG	145.626	41.51	1.66	5.61	I	C	SP	PKP
SJG	145.626	41.51	1.66	5.61	I	C	LP	PKP
RDJ	164.909	179.15	0.91	3.06	I	C	LP	PKP

Table 112. Station data for event 215.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
CBI	1.626	120.41	14.19	92.14	I	C	SP	P
SHK	9.453	316.10	13.72	75.06	I	C	LP	P
SEO	14.955	313.43	12.92	65.49	E	C	LP	P
SSE	17.197	285.26	12.55	62.11	E	C	LP	P
ANP	17.298	265.28	12.45	61.26	I	C	LP	P
BAG	21.766	242.43	9.93	44.37	I	D	LP	P
BAG	21.766	242.43	9.93	44.37	I	D	SP	P
DAV	25.144	217.29	9.46	41.77	I	D	LP	P
DAV	25.144	217.29	9.46	41.77	I	D	SP	P
BTO	28.116	304.69	9.18	40.28	I	C	SP	P
LZH	32.072	294.07	8.74	37.99	I	C	SP	P
CD2	32.145	284.35	8.74	37.99	I	C	SP	P
GTA	35.556	299.49	8.52	36.87	I	C	SP	P
PMG	37.647	169.39	8.41	36.32	I	D	SP	P
CHTO	39.151	265.82	8.32	35.87	I	D	SP	P
CHG	39.151	265.82	8.32	35.87	I	D	SP	P
CHTO	39.151	265.82	8.32	35.87	E	N	LP	P
HNR	41.584	150.51	8.18	35.17	E	D	LP	P
WMQ	44.955	305.19	7.99	34.24	I	C	SP	P
WB2	47.965	187.93	7.81	33.37	I	D	SP	P
CTAO	48.036	172.85	7.81	33.37	I	D	LP	P
CTA	48.036	172.85	7.81	33.37	I	D	SP	P
CTA	48.036	172.85	7.81	33.37	I	D	LP	P
ISQ	48.359	181.32	7.78	33.22	I	D	SP	P
PKI	48.488	283.23	7.78	33.22	I	C	SP	P
KKN	48.546	283.55	7.78	33.22	I	C	SP	P
DMN	48.740	283.36	7.78	33.22	I	C	SP	P
ASPA	51.692	187.84	7.53	32.02	I	D	SP	P
MBL	52.763	204.57	7.41	31.46	I	D	SP	P
KOU	53.359	152.03	7.37	31.27	I	D	SP	P
NDI	55.204	286.93	7.25	30.70	I	D	SP	P
DZM	55.614	150.67	7.21	30.51	I	D	SP	P
HON	55.701	82.22	7.21	30.51	I	C	LP	P
NOU	55.826	150.80	7.18	30.37	I	D	SP	P
COL	57.285	28.76	7.07	29.86	E	N	LP	P
VUN	58.549	136.80	6.99	29.49	I	D	SP	P
KOD	61.593	266.68	6.76	28.43	I	D	SP	P
ADE	62.571	181.76	6.67	28.02	I	D	SP	P
QUE	63.344	291.61	6.59	27.65	I	D	SP	P
QUE	63.344	291.61	6.59	27.65	I	D	LP	P
MUN	63.934	203.01	6.55	27.47	E	D	LP	P
NWAO	64.456	201.70	6.51	27.29	I	D	LP	P
NWAO	64.456	201.70	6.51	27.29	I	C	SP	P
KBS	69.513	350.72	6.10	25.44	E	C	LP	P
RSNT	72.092	28.17	5.92	24.64	E	C	LP	P
DAG	74.781	355.18	5.71	23.71	I	C	SP	P
EDM	76.990	36.38	5.58	23.14	I	C	SP	P
NEW	77.242	42.03	5.58	23.14	I	C	SP	P
LDM	78.212	41.28	5.52	22.88	I	D	SP	P
ORV	78.376	51.43	5.48	22.70	I	C	SP	P

Table 112. Station data for event 215 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BKS	78.609	53.23	5.48	22.70	E	C	LP	P
JAS1	79.867	52.52	5.35	22.13	I	C	SP	P
FFC	81.776	31.36	5.17	21.35	I	C	SP	P
SBB	83.244	54.39	5.11	21.09	I	C	LP	P
ANTO	84.892	312.63	4.99	20.57	I	D	LP	P
PSN	85.661	317.73	4.96	20.44	I	C	SP	P
MUD	86.426	335.35	4.86	20.01	I	C	SP	P
IST	86.666	315.22	4.86	20.01	E	D	LP	P
RSSD	87.123	40.67	4.83	19.89	E	C	LP	P
KSP	87.482	328.38	4.80	19.76	I	D	SP	P
JER	87.491	304.72	4.80	19.76	I	C	SP	P
PVL	87.753	318.58	4.77	19.63	I	C	SP	P
RSON	88.105	31.00	4.77	19.63	E	C	LP	P
BRG	88.534	329.44	4.75	19.54	I	C	SP	P
KDZ	88.550	317.30	4.75	19.54	I	D	SP	P
CLL	88.644	330.17	4.75	19.54	I	D	SP	P
GOL	88.945	44.82	4.73	19.46	E	C	LP	P
VKA	89.231	326.48	4.73	19.46	I	D	SP	P
VTS	89.235	319.03	4.73	19.46	I	D	SP	P
MMB	89.548	318.00	4.71	19.37	I	D	SP	P
KHC	89.934	328.37	4.71	19.37	I	D	SP	P
KMR	90.432	327.35	4.70	19.33	I	D	LP	P
GRF	90.601	329.87	4.70	19.33	I	D	SP	P
ANMO	91.015	49.17	4.69	19.29	E	C	LP	P
HLW	91.314	304.88	4.68	19.24	I	D	SP	P
KBA	91.500	327.03	4.68	19.24	I	D	SP	P
ASW	93.279	299.30	4.63	19.03	I	D	SP	P
CDF	93.282	330.96	4.63	19.03	I	D	SP	P
LPG	95.747	329.35	4.56	18.73	I	D	SP	P
LBF	95.793	331.80	4.55	18.69	I	D	SP	P
SSF	95.928	332.10	4.55	18.69	I	D	SP	P
SMF	96.119	331.66	4.55	18.69	I	D	SP	P
AVF	96.208	332.02	4.55	18.69	I	D	SP	P
BGF	96.603	332.16	4.54	18.65	I	D	SP	P
JCT	98.173	49.33	4.51	18.52	E	C	LP	P
WES	104.100	23.83	4.45	18.26	E	C	LP	Pdf
BLA	104.626	32.80	4.45	18.26	E	C	LP	Pdf
SLR	120.286	255.07	1.87	7.58	I	C	SP	PKP
PRY	121.345	254.02	1.87	7.58	I	D	SP	PKP
SEK	121.630	252.42	1.87	7.57	I	D	SP	PKP
UPA	126.587	52.48	1.86	7.53	I	D	SP	PKP
SDV	132.543	44.07	1.84	7.42	I	D	SP	PKP
ARE	148.261	75.75	1.62	6.53	I	D	SP	PKP
ZOBO	151.038	72.45	1.53	6.18	I	D	SP	PKP
LPB	151.184	72.90	1.53	6.18	I	D	SP	PKP
PEL	152.608	108.70	1.46	5.91	I	D	SP	PKP
TPZ	155.262	80.78	1.39	5.61	I	D	SP	PKP
LPA	162.725	118.36	1.02	4.10	E	D	LP	PKP

Table 113. Station data for event 218.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
CBI	1.471	81.98	4.64	156.26	I	D	SP	P
MRT	8.396	320.46	11.40	98.98	I	C	SP	P
WKY	8.652	328.91	11.43	97.96	I	C	SP	P
TKS	8.806	325.67	11.44	97.43	I	C	SP	P
KOB	9.033	330.60	11.46	96.56	I	C	SP	P
KYO	9.082	334.14	11.47	96.37	I	C	SP	P
MYZ	9.394	304.33	11.49	94.88	I	C	SP	P
SHK	10.184	320.26	11.47	84.07	I	C	SP	P
HMD	10.789	319.68	11.37	80.23	I	C	SP	P
SAG	10.893	307.96	11.35	79.61	I	C	SP	P
WAJ	10.909	344.47	11.34	79.52	I	D	SP	P
FKK	11.026	309.60	11.32	78.91	I	C	SP	P
GUMO	13.842	162.17	10.63	67.13	I	C	SP	P
GUA	13.901	162.05	10.62	66.97	I	C	LP	P
ANP	17.189	268.55	9.99	60.01	E	C	LP	P
CVP	19.570	246.00	9.64	56.72	I	D	SP	P
PIP	20.257	249.24	9.56	55.96	I	D	SP	P
SZP	20.769	247.55	9.50	55.42	I	D	SP	P
MAN	21.860	240.04	9.40	54.57	I	D	SP	P
BJI	24.100	309.11	9.20	52.89	E	D	LP	P
KVG	30.917	159.76	8.61	48.27	I	C	SP	P
LZH	32.454	295.55	8.52	47.59	I	D	SP	P
LZH	32.454	295.55	8.52	47.59	I	D	LP	P
KMI	33.944	275.63	8.44	47.00	E	D	LP	P
LMG	36.341	167.25	8.30	46.02	J	C	SP	P
PMG	36.647	169.03	8.29	45.91	J	C	SP	P
CHTO	39.033	267.05	8.15	44.97	J	D	SP	P
BDT	39.529	264.71	8.13	44.83	I	D	SP	P
ADK	40.587	40.32	8.07	44.40	J	D	SP	P
WB2	46.939	187.99	7.69	41.79	I	C	SP	P
CTAO	47.024	172.66	7.68	41.75	J	C	SP	P
CTAO	47.024	172.66	7.68	41.75	E	C	LP	P
CTA	47.024	172.66	7.68	41.75	I	C	SP	P
ISQ	47.330	181.26	7.66	41.59	J	C	SP	P
PKI	48.678	284.09	7.55	40.89	I	D	SP	P
KKN	48.742	284.41	7.55	40.86	I	D	SP	P
DMN	48.932	284.22	7.53	40.75	I	D	SP	P
ASPA	50.666	187.88	7.40	39.91	I	C	SP	P
RMQ	53.653	170.86	7.17	38.45	I	C	SP	P
TTA	54.358	30.24	7.12	38.13	I	D	SP	P
NOU	54.958	150.39	7.09	37.90	J	C	SP	P
BRS	55.233	166.75	7.07	37.77	I	C	SP	P
IMA	55.928	26.69	7.01	37.42	I	D	SP	P
BRW	56.087	20.21	7.00	37.35	I	D	SP	P
PMR	57.390	32.32	6.90	36.76	I	D	SP	P
HYB	57.710	274.34	6.88	36.60	I	D	SP	P
FBA	58.213	28.45	6.84	36.35	I	D	SP	P
COL	58.213	28.45	6.84	36.35	I	D	SP	P
YOU	61.282	172.60	6.60	34.90	I	C	SP	P
POO	61.489	277.41	6.58	34.80	I	D	SP	P

Table 113. Station data for event 218 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ADE	61.542	181.72	6.58	34.78	I	C	SP	P
CAN	62.384	172.20	6.51	34.37	I	C	SP	P
WAM	63.231	172.45	6.44	33.96	I	C	SP	P
NWAO	63.482	201.84	6.42	33.84	E	D	LP	P
QUE	63.676	292.07	6.41	33.75	I	D	SP	P
QUE	63.676	292.07	6.41	33.75	I	D	LP	P
MBC	66.464	14.90	6.19	32.43	I	D	SP	P
ALE	70.251	3.11	5.91	30.83	I	D	SP	P
KBS	70.518	350.77	5.89	30.71	I	D	SP	P
KEV	72.689	340.47	5.75	29.89	E	D	LP	P
KEV	72.689	340.47	5.75	29.89	I	D	SP	P
RSNT	73.025	28.00	5.72	29.73	I	D	SP	P
YKC	73.075	27.98	5.72	29.71	I	D	SP	P
IR2	74.600	302.36	5.62	29.13	I	D	SP	P
KJF	75.355	335.36	5.58	28.92	I	D	SP	P
PNT	76.097	41.63	5.53	28.62	I	D	SP	P
FHC	76.810	50.92	5.49	28.39	I	D	SP	P
EDM	77.851	36.23	5.42	28.00	I	D	SP	P
WDC	77.902	50.66	5.41	27.97	I	D	SP	P
NEW	78.043	41.86	5.40	27.91	I	D	SP	P
NUR	78.585	332.99	5.33	27.54	I	D	SP	P
SLY	78.658	304.11	5.33	27.50	I	C	SP	P
LDM	79.021	41.12	5.29	27.30	I	D	SP	P
ORV	79.061	51.25	5.29	27.28	I	D	SP	P
ZSP	79.224	52.99	5.27	27.20	I	D	SP	P
BKS	79.269	53.04	5.27	27.20	I	D	SP	P
PCC	79.326	53.44	5.27	27.17	I	D	SP	P
JAS1	80.536	52.36	5.17	26.62	I	D	SP	P
PR1	81.160	54.06	5.13	26.41	I	D	SP	P
FRI	81.463	52.94	5.12	26.32	I	D	SP	P
BUT	81.851	42.35	5.09	26.19	I	D	SP	P
MNA	81.892	51.08	5.09	26.18	I	D	SP	P
HRV	81.933	41.49	5.09	26.17	I	D	SP	P
LRM	82.015	42.48	5.08	26.14	I	D	SP	P
CCMT	82.216	43.42	5.07	26.07	I	D	SP	P
SXM	82.592	41.75	5.05	25.95	I	D	SP	P
FFC	82.682	31.26	5.04	25.91	I	D	SP	P
KONO	84.822	337.34	4.88	25.01	I	C	LP	P
PPE	85.291	320.08	4.84	24.83	I	C	SP	P
ANTO	85.548	312.67	4.83	24.74	E	D	LP	P
ODD	85.576	338.66	4.83	24.73	I	D	SP	P
BER	85.666	339.46	4.82	24.70	I	C	LP	P
TLB	85.965	318.57	4.81	24.62	I	D	SP	P
VRI	85.999	320.15	4.80	24.60	I	D	SP	P
CVO	86.341	320.33	4.78	24.48	I	D	SP	P
PSN	86.385	317.75	4.78	24.47	I	C	SP	P
COP	86.645	333.49	4.77	24.40	I	C	SP	P
MLR	86.665	320.16	4.76	24.39	I	D	SP	P
BMR	86.730	322.92	4.76	24.38	I	C	SP	P
HRI	86.882	305.79	4.76	24.35	I	D	SP	P

Table 113. Station data for event 218 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KRA	87.088	326.25	4.75	24.31	I	D	SP	P
MUD	87.338	335.35	4.74	24.24	I	C	SP	P
SPC	87.488	325.45	4.73	24.21	I	D	SP	P
JER	88.032	304.73	4.71	24.10	I	D	SP	P
KSP	88.329	328.38	4.71	24.11	I	D	SP	P
PVL	88.488	318.58	4.71	24.10	I	D	SP	P
PRNI	88.903	303.59	4.70	24.05	I	D	SP	P
ELL	89.133	311.25	4.70	24.04	I	C	SP	P
KDZ	89.268	317.29	4.70	24.05	I	D	SP	P
SRO	89.358	325.23	4.70	24.05	I	D	SP	P
BRG	89.391	329.42	4.70	24.05	I	D	SP	P
CLL	89.509	330.15	4.70	24.05	I	D	SP	P
ZST	89.715	326.06	4.70	24.03	I	C	SP	P
EZN	89.727	315.38	4.70	24.03	I	D	SP	P
PRU	89.733	328.52	4.70	24.03	I	D	SP	P
VTS	89.975	319.01	4.69	24.00	I	D	SP	P
YER	90.002	312.30	4.69	23.99	I	D	SP	P
VKA	90.058	326.46	4.69	23.98	I	D	SP	P
SOP	90.330	325.92	4.68	23.92	I	D	SP	P
MOX	90.598	330.31	4.67	23.87	I	D	SP	P
HOF	90.720	329.96	4.67	23.86	I	D	SP	P
KHC	90.780	328.34	4.66	23.85	I	D	SP	P
WIT	91.048	334.05	4.66	23.82	I	C	SP	P
WET	91.096	328.67	4.66	23.81	I	D	SP	P
VAY	91.129	318.29	4.66	23.81	I	D	SP	P
KMR	91.268	327.31	4.66	23.81	I	D	LP	P
EDU	91.341	340.79	4.66	23.80	I	D	SP	P
SKO	91.391	319.32	4.65	23.79	I	D	SP	P
GRF	91.462	329.83	4.65	23.78	I	D	SP	P
WTS	91.618	333.45	4.65	23.76	I	C	SP	P
ALQ	91.730	49.17	4.64	23.73	I	D	SP	P
EAR	92.034	341.23	4.63	23.66	I	D	SP	P
BHG	92.104	327.66	4.63	23.65	I	D	SP	P
KBA	92.333	326.98	4.63	23.64	I	D	SP	P
LJU	92.465	325.67	4.62	23.62	I	D	SP	P
FUR	92.541	328.74	4.62	23.61	I	D	SP	P
VOY	92.794	325.97	4.61	23.54	I	D	SP	P
ENN	92.919	333.09	4.60	23.52	I	C	SP	P
STU	93.041	330.17	4.60	23.49	I	D	SP	P
TRI	93.084	325.80	4.60	23.48	I	D	SP	P
SNF	93.773	333.74	4.57	23.34	I	C	SP	P
DOU	93.976	333.33	4.56	23.30	I	C	SP	P
MTD	114.021	262.69	1.88	9.39	I	C	SP	PKP
KRI	115.785	263.43	1.88	9.38	I	D	SP	PKP
BNG	115.932	289.91	1.88	9.37	I	D	SP	PKP
SPA	116.736	180.00	1.88	9.37	I	D	SP	PKP
BUL	117.867	260.38	1.88	9.35	I	D	SP	PKP
SLR	119.964	254.48	1.87	9.34	I	D	SP	PKP
KSR	121.195	254.76	1.87	9.34	I	C	SP	PKP
SOB1	162.358	4.70	1.04	5.15	I	D	SP	PKP

Figure 43. Azimuthal equidistant map for geographic subdivision,
Ryukyu - Taiwan - N. Philippine Islands

FIRST MOTION FM LOCATIONS
1984-1985
RYUKYU-TAIWAN-N. P.I.

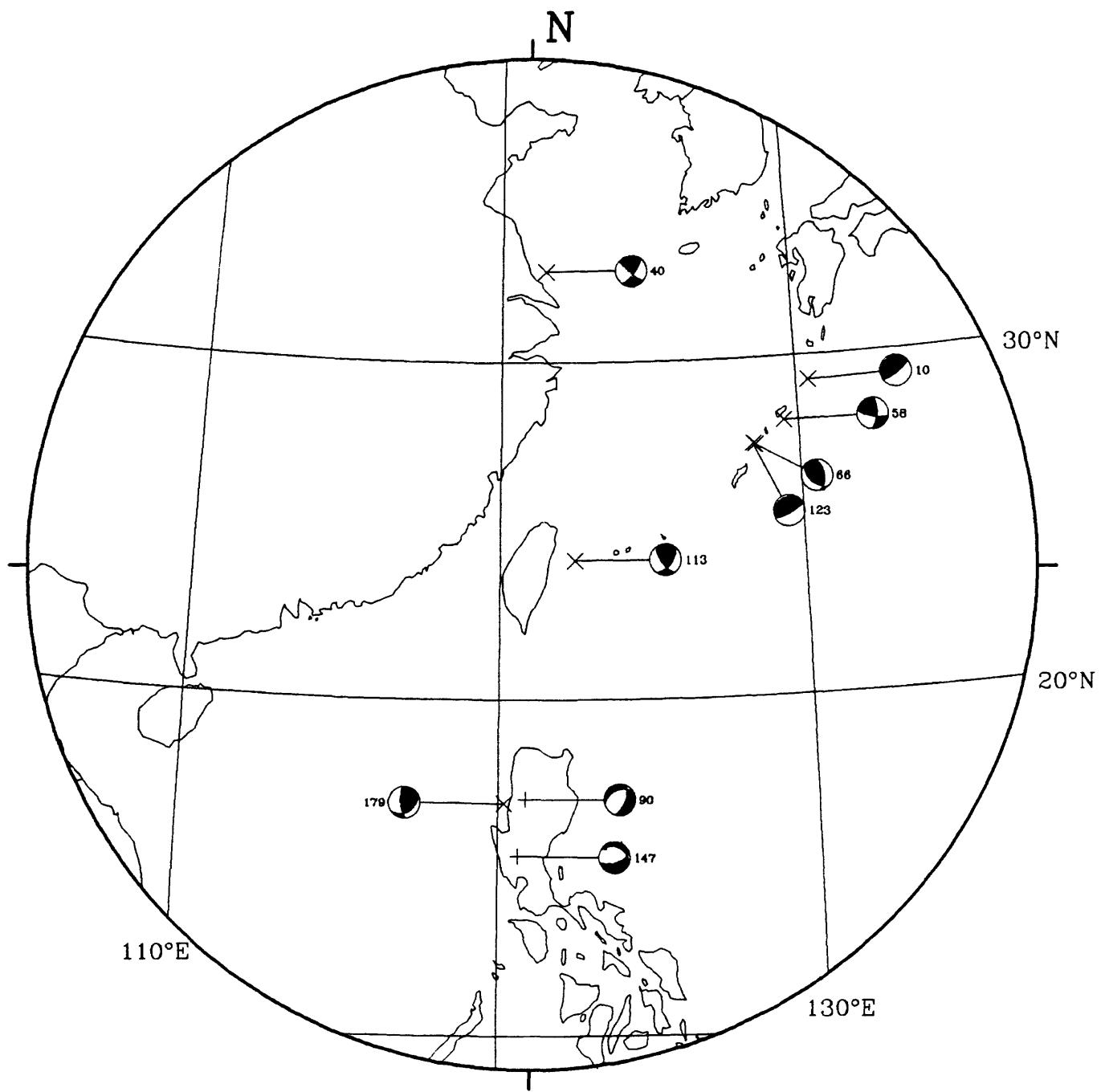


Table 114. Focal mechanism parameters for subdivision,
Ryukyu-Taiwan-N. Philippine Islands

EVENT #	NODAL PLANE 1 (DEG)			NODAL PLANE 2 (DEG)			T AXIS (DEG)		P AXIS (DEG)		B AXIS (DEG)	
	ϑ	δ	λ	ϑ	δ	λ	PLG	AZM	PLG	AZM	PLG	AZM
10	50	77	90	23	13	90	58	320	32	140	0	50
40	36	70	167	131	78	20	23	354	5	262	66	160
58	100	73	25	2	66	161	30	323	5	230	60	132
66	350	50	115	134	46	63	71	327	2	63	19	153
90	247	35	-50	21	64	-44	16	129	63	252	22	32
113	145	65	40	35	54	149	45	5	6	268	44	172
123	60	75	90	240	15	90	60	330	30	150	0	60
147	72	67	-110	295	30	-51	20	177	63	310	18	80
179	175	71	59	57	36	146	53	47	20	288	29	186

Figure 44. Lower hemisphere focal sphere projection for events 10, 40, 58, and 66.

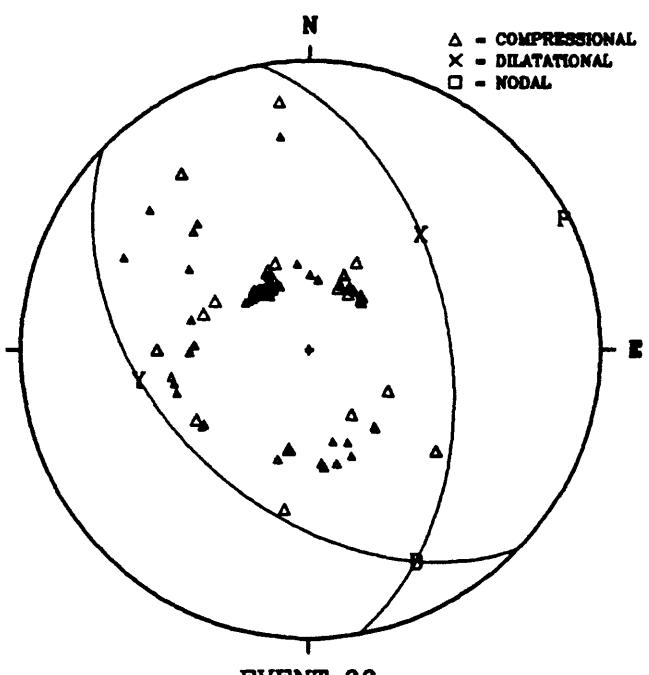
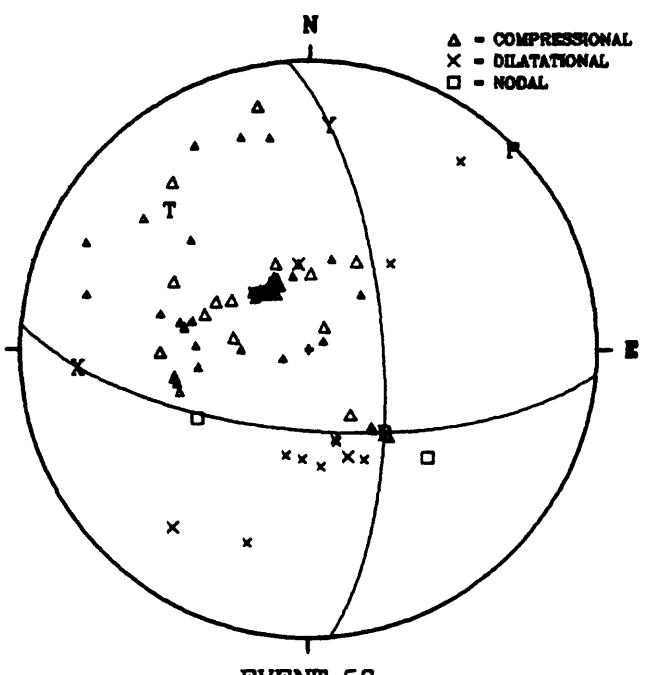
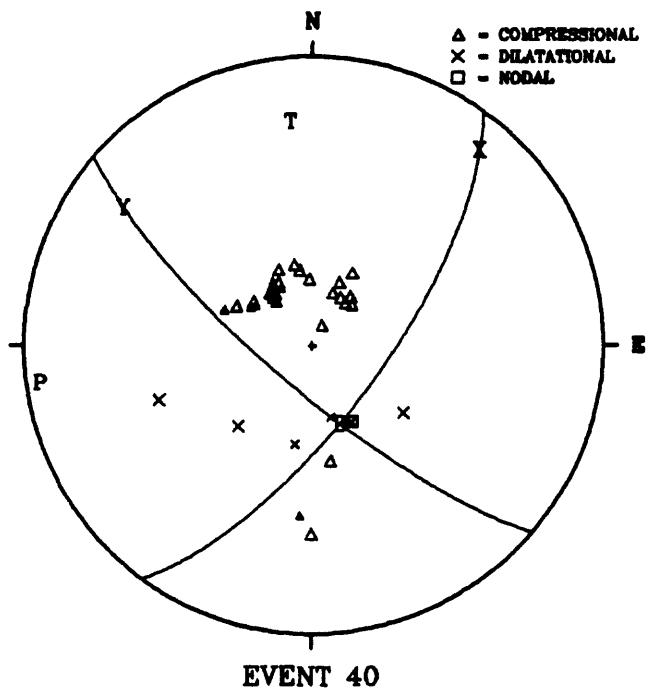
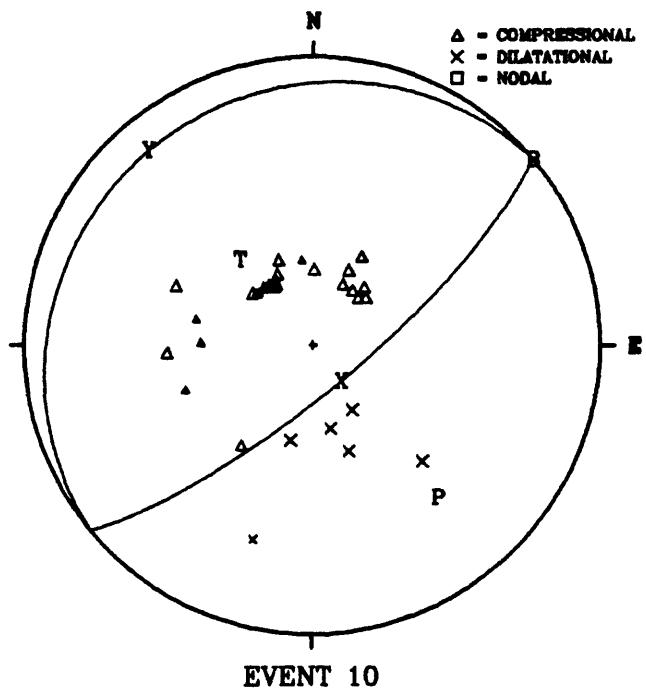
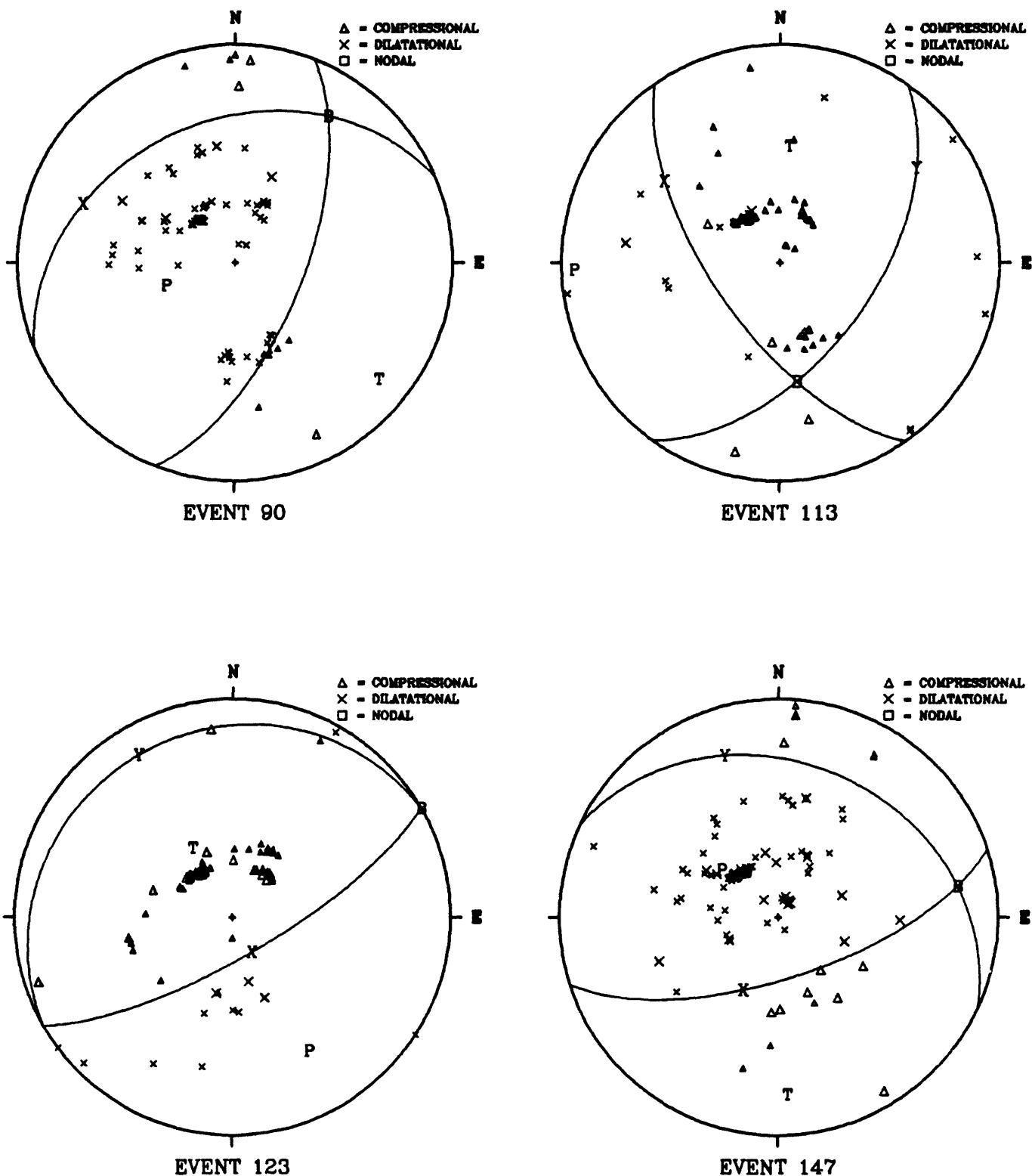


Figure 45. Lower hemisphere focal sphere projection for events 90, 113, 123, and 147.



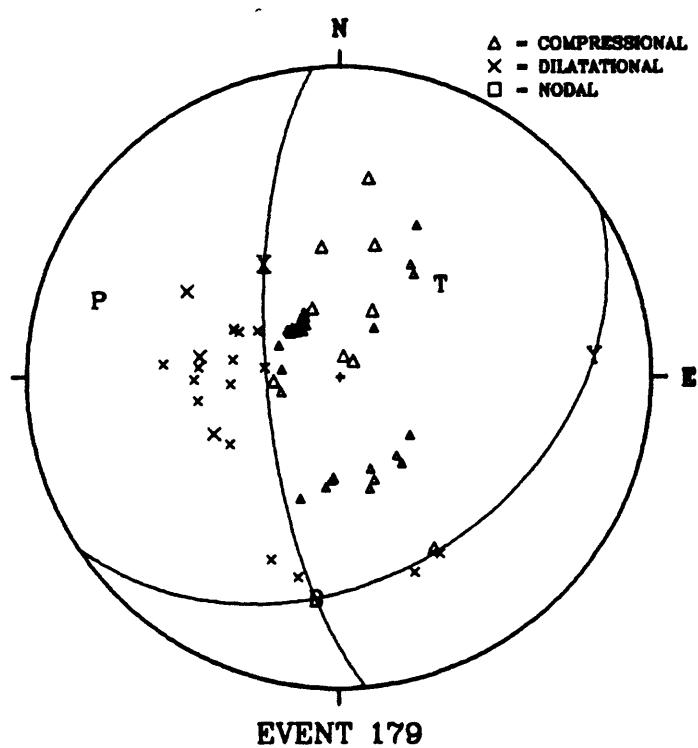


Table 115. Station data for event 10.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
PLP	18.701	196.82	12.24	59.61	I	D	SP	P
GUA	20.632	136.26	10.28	46.42	I	D	LP	P
LZH	23.328	293.84	9.66	42.90	I	C	LP	P
KMI	24.925	267.08	9.46	41.81	E	C	LP	P
NST	30.962	250.71	8.82	38.43	I	C	SP	P
LEM	42.046	215.05	8.15	35.05	E	C	LP	P
NDI	46.195	282.91	7.93	33.98	I	C	SP	P
CTAO	51.381	160.82	7.53	32.05	E	D	LP	P
POO	52.371	271.58	7.45	31.67	I	C	SP	P
COL	60.469	29.03	6.84	28.82	I	C	LP	P
NWAO	63.087	192.41	6.63	27.85	E	D	LP	P
KEV	67.337	338.47	6.26	26.18	I	C	LP	P
DAG	72.526	352.89	5.88	24.48	I	C	SP	P
TAU	73.472	167.11	5.81	24.17	E	D	LP	P
RSNT	74.992	25.84	5.71	23.73	E	C	LP	P
KONO	78.958	333.61	5.45	22.59	E	C	LP	P
IST	79.206	310.99	5.45	22.59	E	C	LP	P
LON	80.246	41.64	5.35	22.15	E	C	LP	P
JOS	80.475	320.62	5.30	21.93	I	C	SP	P
PVL	80.606	314.29	5.30	21.93	I	D	SP	P
MUD	81.209	331.29	5.26	21.76	I	C	SP	P
KDZ	81.275	312.92	5.21	21.54	I	C	SP	P
SNZO	81.288	147.84	5.21	21.54	E	D	LP	P
KSP	81.394	324.17	5.21	21.54	I	C	SP	P
GDH	81.747	1.42	5.21	21.54	E	C	LP	P
VTS	82.125	314.59	5.17	21.37	I	C	SP	P
MMB	82.336	313.52	5.14	21.24	I	C	SP	P
BRG	82.563	325.10	5.14	21.24	I	C	SP	P
CLL	82.760	325.82	5.11	21.11	I	C	SP	P
PRU	82.804	324.16	5.11	21.11	I	C	SP	P
KHC	83.827	323.87	5.05	20.85	I	C	SP	P
MOX	83.860	325.86	5.05	20.85	I	C	SP	P
WET	84.177	324.17	5.05	20.85	I	C	SP	P
KMR	84.203	322.79	5.05	20.85	I	C	LP	P
GRFO	84.669	325.29	5.02	20.72	E	C	LP	P
BHG	85.072	323.05	4.99	20.59	I	C	SP	P
KBA	85.228	322.35	4.99	20.59	I	C	SP	P
BNS	85.769	327.96	4.90	20.20	I	D	SP	P
JAS	85.930	48.48	4.90	20.20	I	C	LP	P
GWG	86.907	326.30	4.83	19.90	I	D	SP	P
CDF	87.459	326.04	4.80	19.77	I	C	SP	P
HAU	88.190	326.17	4.77	19.64	I	C	SP	P
SMF	90.361	326.40	4.70	19.34	I	C	SP	P
AVF	90.492	326.74	4.70	19.34	I	C	SP	P
FLN	90.802	329.98	4.69	19.30	I	C	SP	P
RSON	91.241	26.18	4.69	19.30	E	C	LP	P
GRR	91.248	329.92	4.69	19.30	I	C	SP	P
RSSD	91.648	35.89	4.68	19.26	E	C	LP	P
MFF	92.270	328.37	4.66	19.17	I	C	SP	P
ANMO	96.618	43.83	4.54	18.66	E	C	LP	P

Table 116. Station data for event 40.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ANP	7.477	179.95	13.98	55.04	E	C	LP	P
SZP	15.100	183.86	12.98	49.54	I	C	SP	P
KMI	18.064	250.16	12.41	46.68	E	D	LP	P
DAV	25.748	170.68	9.43	33.56	E	C	LP	P
GUMO	28.567	126.27	9.13	32.36	E	D	LP	P
SNG	31.955	221.96	8.76	30.90	I	D	LP	P
DNP	41.563	189.41	8.19	28.69	I	D	SP	P
MHI	50.474	292.35	7.62	26.53	I	C	SP	P
CTA	57.561	152.21	7.08	24.52	I	D	SP	P
CTAO	57.561	152.21	7.08	24.52	I	N	LP	P
TAB	59.987	298.21	6.89	23.82	E	C	LP	P
COL	61.204	29.13	6.80	23.49	I	C	LP	P
KEV	61.265	336.68	6.76	23.35	I	C	LP	P
KBS	61.799	348.06	6.72	23.20	E	C	LP	P
DAG	68.066	350.87	6.23	21.42	I	C	LP	P
UPP	68.788	328.29	6.15	21.13	I	C	SP	P
ADE	69.201	164.94	6.15	21.13	I	D	SP	P
IST	71.123	307.00	6.00	20.59	I	C	LP	P
ELL	72.471	302.64	5.89	20.20	I	C	SP	P
COP	73.334	326.03	5.82	19.95	E	C	LP	P
BER	73.644	332.32	5.82	19.95	E	C	LP	P
MUD	74.393	327.78	5.75	19.70	I	C	SP	P
RSNT	75.084	23.52	5.72	19.59	I	C	LP	P
ATH	76.180	306.25	5.65	19.34	I	C	SP	P
GRFO	77.369	321.37	5.55	18.99	I	C	LP	P
FUR	78.234	320.08	5.52	18.88	I	C	SP	P
GDH	78.307	358.20	5.49	18.77	I	C	LP	P
STU	78.981	321.42	5.45	18.63	I	C	LP	P
CDF	80.207	321.93	5.37	18.35	I	C	SP	P
ESK	80.423	331.54	5.31	18.14	I	C	SP	P
ECK	80.488	331.41	5.31	18.14	I	C	SP	P
LON	82.544	38.29	5.15	17.57	I	C	LP	P
LBF	82.832	322.27	5.12	17.47	I	C	SP	P
GRC	83.090	322.92	5.12	17.47	I	D	SP	P
SMF	83.126	322.07	5.12	17.47	I	C	SP	P
LMR	83.835	318.30	5.06	17.25	I	C	SP	P
LRG	83.842	318.47	5.06	17.25	I	C	SP	P
MZF	84.062	322.33	5.06	17.25	I	C	SP	P
TCF	84.205	322.56	5.06	17.25	I	C	SP	P
GRR	84.283	325.54	5.02	17.11	I	C	SP	P
CAF	85.200	321.62	4.99	17.01	I	C	SP	P
JAS	89.112	44.25	4.73	16.10	I	C	LP	P
RSON	91.207	21.44	4.70	15.99	E	C	LP	P
TOL	91.960	321.21	4.67	15.89	E	C	LP	P
TOL	91.960	321.21	4.67	15.89	I	C	SP	P
RSSD	93.015	30.99	4.65	15.82	E	C	LP	P
ANMO	99.061	38.16	4.48	15.23	E	C	LP	P
SHA	111.002	27.16	1.89	6.36	E	C	LP	PKP

Table 117. Station data for event 58.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SEO	9.675	347.82	13.70	75.27	I	C	LP	P
NJ2	10.044	295.63	13.65	74.50	I	C	SP	P
MAT	11.161	38.92	13.52	72.64	I	D	SP	P
DL2	12.619	330.61	13.31	69.99	I	C	SP	P
WHN	13.462	284.04	13.16	68.28	I	C	SP	P
BAG	14.274	217.25	12.99	66.50	I	D	LP	P
SNY	14.525	342.01	12.99	66.50	I	C	SP	P
CN2	16.002	349.24	12.72	63.89	I	C	SP	P
BJI	16.226	320.62	12.72	63.89	E	C	LP	P
TIY	17.232	308.11	12.53	62.20	I	C	SP	P
MAP	18.440	197.49	12.23	59.70	I	D	SP	P
BTO	20.310	312.90	10.27	46.47	I	C	SP	P
GUA	20.384	132.19	10.27	46.47	E	N	LP	P
CD2	22.585	283.37	9.83	43.94	I	C	SP	P
LZH	23.120	296.62	9.74	43.44	I	C	LP	P
KMI	24.115	269.12	9.59	42.61	I	C	LP	P
CHTO	29.471	258.39	8.96	39.24	I	C	SP	P
CHG	29.471	258.39	8.96	39.24	I	C	LP	P
NST	29.861	251.72	8.90	38.92	I	C	SP	P
BDT	30.086	255.50	8.90	38.92	I	C	SP	P
LSA	33.534	282.10	8.64	37.59	I	C	SP	P
SNG	34.360	238.20	8.58	37.28	E	N	LP	P
PKI	38.854	279.92	8.32	35.97	I	C	SP	P
KKN	38.924	280.29	8.32	35.97	I	C	SP	P
PMG	41.003	152.91	8.21	35.42	I	D	SP	P
ND1	45.708	283.74	7.96	34.19	I	C	SP	P
ADK	46.276	43.80	7.90	33.90	I	D	SP	P
HNR	47.518	137.36	7.84	33.61	E	C	LP	P
WB2	47.987	173.88	7.81	33.46	I	D	SP	P
CTAO	50.562	159.49	7.61	32.50	E	D	LP	P
CTA	50.562	159.49	7.61	32.50	I	D	SP	P
POO	51.636	272.07	7.53	32.11	I	C	SP	P
KOD	51.877	260.66	7.49	31.92	I	C	SP	P
WBN	54.000	183.27	7.33	31.16	I	D	SP	P
QUE	54.075	288.36	7.33	31.16	I	C	LP	P
MEK	55.410	191.95	7.21	30.60	I	D	SP	P
MHI	58.675	297.27	6.99	29.57	I	C	LP	P
KOU	58.898	141.40	6.95	29.38	I	C	SP	P
NOU	61.499	140.72	6.75	28.46	I	C	SP	P
COL	61.849	28.68	6.71	28.27	E	C	LP	P
YOU	64.555	162.76	6.51	27.36	I	D	SP	P
CAN	65.702	162.59	6.43	27.00	I	D	SP	P
WAM	66.496	163.00	6.34	26.59	I	D	SP	P
MBC	67.742	13.96	6.26	26.23	I	C	SP	P
KEV	68.124	338.52	6.22	26.05	I	C	LP	P
TAB	68.268	302.46	6.18	25.87	I	C	LP	P
DAG	73.570	352.75	5.81	24.21	I	C	SP	P
DAG	73.570	352.75	5.81	24.21	E	D	LP	P
PPE	77.843	315.97	5.51	22.89	I	D	SP	P
CLI	77.891	316.38	5.51	22.89	I	D	SP	P

Table 117. Station data for event 58 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
TLB	78.345	314.36	5.48	22.76	I	C	SP	P
CVO	78.915	316.10	5.45	22.63	I	C	SP	P
ISR	79.016	315.36	5.45	22.63	I	D	SP	P
MLR	79.217	315.89	5.45	22.63	I	C	SP	P
KONO	79.642	333.42	5.41	22.45	I	C	LP	P
BUC1	79.720	314.84	5.41	22.45	I	C	SP	P
COZ	80.282	316.30	5.30	21.97	I	D	SP	P
SPC	80.665	321.12	5.30	21.97	I	C	SP	P
SNZO	80.733	147.22	5.30	21.97	E	C	LP	P
BER	80.791	335.41	5.25	21.75	I	C	LP	P
DEV	80.866	317.31	5.25	21.75	I	C	SP	P
JOS	80.871	320.42	5.25	21.75	I	C	SP	P
COP	80.893	329.29	5.25	21.75	I	C	SP	P
COP	80.893	329.29	5.25	21.75	E	C	LP	P
GZR	81.195	316.93	5.25	21.75	I	D	SP	P
CLO	81.345	316.65	5.21	21.58	I	D	SP	P
ARO	81.767	278.65	5.17	21.41	E	C	LP	P
MUD	81.843	331.06	5.17	21.41	I	C	SP	P
COR	81.872	43.61	5.17	21.41	I	C	SP	P
BUD	82.275	320.12	5.14	21.28	I	C	SP	P
BRL	82.430	326.39	5.14	21.28	I	C	SP	P
BRN	82.505	326.38	5.14	21.28	I	C	SP	P
GDH	82.914	1.10	5.11	21.15	E	C	LP	P
BRG	83.061	324.85	5.11	21.15	I	C	SP	P
AKU	83.250	347.10	5.08	21.02	I	C	SP	P
CLL	83.274	325.56	5.08	21.02	I	C	SP	P
PRU	83.281	323.90	5.08	21.02	I	C	SP	P
VIE	83.326	321.77	5.08	21.02	I	C	SP	P
VKA	83.340	321.80	5.08	21.02	I	C	SP	P
VAY	83.447	313.51	5.08	21.02	I	C	SP	P
SOP	83.543	321.23	5.08	21.02	I	C	SP	P
THE	83.553	312.76	5.08	21.02	I	C	SP	P
SKO	83.820	314.52	5.05	20.89	I	C	SP	P
KHC	84.297	323.58	5.02	20.76	I	D	SP	P
MOX	84.374	325.57	5.02	20.76	I	C	LP	P
HOF	84.449	325.20	5.02	20.76	I	C	SP	P
KMR	84.648	322.50	5.02	20.76	I	C	LP	P
WET	84.653	323.88	5.02	20.76	I	C	SP	P
GRF	85.168	324.98	4.99	20.63	I	C	SP	P
BHG	85.523	322.74	4.96	20.50	I	C	SP	P
LJU	85.630	320.71	4.96	20.50	I	C	SP	P
KBA	85.663	322.04	4.96	20.50	I	C	SP	P
CEY	85.872	320.51	4.90	20.24	I	C	SP	P
FUR	86.095	323.76	4.90	20.24	I	C	SP	P
TRI	86.261	320.77	4.86	20.07	I	C	SP	P
DBN	86.486	329.32	4.86	20.07	I	C	LP	P
OGA	87.042	322.85	4.82	19.89	I	C	SP	P
ENN	87.051	328.02	4.82	19.89	I	C	SP	P
GWF	87.431	325.95	4.80	19.81	I	C	SP	P
OSS	87.626	323.10	4.80	19.81	E	C	LP	P

Table 117. Station data for event 58 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
WLF	87.688	327.10	4.80	19.81	E	C	LP	P
SAX	87.684	323.88	4.80	19.81	E	C	LP	P
SLE	87.789	324.65	4.77	19.68	E	C	LP	P
CDF	87.977	325.67	4.77	19.68	I	C	SP	P
ZUL	88.028	324.48	4.77	19.68	E	C	LP	P
VDL	88.111	323.24	4.77	19.68	E	C	LP	P
LLS	88.113	323.74	4.77	19.68	E	C	LP	P
TMA	88.673	323.22	4.75	19.59	E	C	LP	P
MMK	89.187	323.59	4.73	19.51	E	C	LP	P
DMU	90.068	335.93	4.71	19.42	I	C	SP	P
DDK	90.265	335.34	4.70	19.38	I	C	SP	P
DLE	90.419	335.38	4.70	19.38	I	C	SP	P
LOR	90.443	326.40	4.70	19.38	I	C	SP	P
LBF	90.583	326.14	4.70	19.38	I	C	SP	P
DCN	90.642	335.76	4.70	19.38	I	C	SP	P
SSF	90.760	326.42	4.69	19.34	I	C	SP	P
ETA	90.763	334.86	4.69	19.34	I	C	SP	P
AVF	91.025	326.30	4.69	19.34	I	C	SP	P
ECP	91.230	334.61	4.69	19.34	I	C	SP	P
LDF	91.368	329.24	4.68	19.29	I	C	SP	P
LRG	91.768	322.41	4.67	19.25	I	C	SP	P
GRR	91.851	329.47	4.67	19.25	I	C	SP	P
LPF	92.197	329.32	4.67	19.25	I	C	SP	P
CAF	92.980	325.62	4.64	19.12	I	C	SP	P
NAI	92.997	270.16	4.64	19.12	I	C	SP	P
PTO	100.943	329.10	4.45	18.31	E	C	LP	P
SLR	110.958	251.32	1.89	7.67	I	C	SP	PKP
SHA	111.373	34.42	1.89	7.67	E	C	LP	PKP
LPB	160.068	58.41	1.17	4.73	I	C	SP	PKP

Table 118. Station data for event 66.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
SEO	10.191	352.99	13.63	75.26	E	C	LP P
BJI	16.215	323.98	12.71	64.40	E	C	LP P
CN2	16.522	352.15	12.62	63.56	I	C	SP P
TIY	16.978	311.17	12.52	62.67	I	C	SP P
XAN	18.081	296.14	12.32	60.94	I	C	SP P
HHC	19.350	318.09	10.53	48.34	I	C	SP P
BTO	20.142	315.42	10.39	47.49	I	C	SP P
DAV	20.423	188.41	10.26	46.72	E	C	LP P
GUA	20.622	128.82	10.26	46.72	E	C	LP P
KMI	23.223	270.18	9.73	43.66	E	C	LP P
GTA	26.661	303.96	9.32	41.40	I	C	SP P
CHG	28.468	258.80	9.09	40.16	I	C	SP P
NST	28.808	251.90	9.02	39.79	I	C	SP P
BDT	29.060	255.80	9.02	39.79	I	C	SP P
SNG	33.251	237.89	8.64	37.81	E	C	LP P
IPM	34.685	233.98	8.58	37.50	I	C	SP P
PSI	37.494	234.16	8.40	36.58	I	C	SP P
NDI	45.009	284.13	7.99	34.54	I	C	SP P
HYB	46.992	268.67	7.87	33.95	I	C	SP P
WB2	47.425	172.55	7.84	33.80	I	C	SP P
ISQ	49.031	166.28	7.73	33.26	I	C	SP P
CTA	50.255	158.14	7.61	32.68	I	C	SP P
POO	50.774	272.18	7.57	32.49	I	C	SP P
ASPA	51.056	173.66	7.57	32.49	I	C	SP P
NAU	51.245	195.50	7.57	32.49	I	C	SP P
QUE	53.446	288.57	7.37	31.53	I	C	LP P
MHI	58.195	297.42	7.03	29.92	I	C	LP P
BAL	58.797	191.91	6.95	29.55	I	C	SP P
KOU	58.937	140.26	6.95	29.55	I	C	SP P
NWAO	60.969	190.85	6.79	28.80	I	C	SP P
NWAO	60.969	190.85	6.79	28.80	E	C	LP P
NOU	61.550	139.66	6.75	28.62	J	C	SP P
COO	61.845	157.17	6.71	28.43	I	C	SP P
COL	62.863	28.45	6.63	28.06	E	C	LP P
TOO	66.584	165.36	6.34	26.73	I	C	SP P
KEV	68.424	338.48	6.18	26.01	E	C	LP P
KJF	70.184	332.81	6.06	25.47	I	C	SP P
AFI	70.970	117.52	5.99	25.15	E	C	LP P
NUR	72.982	329.84	5.85	24.52	I	C	SP P
DAG	74.124	352.56	5.78	24.21	I	C	SP P
UPP	76.379	330.98	5.61	23.46	I	C	SP P
RSNT	77.350	25.13	5.55	23.19	I	C	LP P
YKC	77.395	25.10	5.55	23.19	I	C	SP P
CEA	78.383	316.97	5.48	22.88	I	C	SP P
HNM	78.974	317.64	5.44	22.71	I	C	SP P
MLR	79.080	315.63	5.44	22.71	I	C	SP P
KONO	79.844	333.15	5.35	22.31	I	C	LP P
VLR	80.103	317.55	5.35	22.31	I	C	SP P
KRA	80.348	321.70	5.30	22.09	I	C	SP P
ELL	80.447	306.36	5.30	22.09	I	C	SP P

Table 118. Station data for event 66 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SPC	80.629	320.84	5.30	22.09	I	C	SP	P
SNZO	80.654	146.57	5.30	22.09	E	C	LP	P
JOS	80.821	320.14	5.25	21.87	I	C	SP	P
COP	81.015	329.00	5.25	21.87	I	C	SP	P
KDZ	81.291	312.41	5.21	21.70	I	C	SP	P
IZM	81.548	308.82	5.21	21.70	I	C	SP	P
KSP	81.890	323.64	5.17	21.52	I	C	SP	P
MUD	82.000	330.75	5.17	21.52	I	C	SP	P
BUD	82.219	319.81	5.17	21.52	I	C	SP	P
VTS	82.212	314.04	5.17	21.52	I	C	SP	P
BRN	82.570	326.06	5.14	21.39	I	C	SP	P
COR	82.970	43.17	5.11	21.26	I	C	SP	P
PRU	83.299	323.57	5.08	21.13	I	C	SP	P
VKA	83.317	321.47	5.08	21.13	I	C	SP	P
CLL	83.323	325.23	5.08	21.13	I	C	SP	P
THE	83.355	312.42	5.08	21.13	I	C	SP	P
EDM	83.449	32.27	5.08	21.13	I	C	SP	P
GDH	83.600	0.74	5.08	21.13	I	C	SP	P
SKO	83.656	314.17	5.08	21.13	I	C	SP	P
KHC	84.308	323.23	5.02	20.87	I	C	SP	P
MOX	84.424	325.22	5.02	20.87	I	C	SP	P
HOF	84.492	324.85	5.02	20.87	J	C	SP	P
NEW	84.498	37.71	5.02	20.87	J	C	SP	P
FHC	84.527	46.67	5.02	20.87	J	C	SP	P
KMR	84.638	322.14	5.02	20.87	I	C	LP	P
WET	84.670	323.52	5.02	20.87	J	C	SP	P
YKM	84.902	36.67	4.99	20.74	I	C	SP	P
GRF	85.206	324.61	4.99	20.74	I	C	SP	P
RXF	85.211	36.43	4.99	20.74	I	C	SP	P
LHD	85.344	37.09	4.96	20.61	I	C	SP	P
LDM	85.356	36.84	4.96	20.61	I	C	SP	P
WIT	85.451	328.85	4.96	20.61	I	C	SP	P
BHG	85.517	322.37	4.96	20.61	I	C	SP	P
WDC	85.576	46.27	4.96	20.61	I	C	SP	P
CLX	85.601	36.90	4.96	20.61	I	C	SP	P
KBA	85.644	321.60	4.96	20.61	I	C	SP	P
FUR	86.109	323.37	4.90	20.35	I	C	SP	P
TR1	86.217	320.38	4.90	20.35	I	C	SP	P
TNS	86.274	326.15	4.86	20.17	I	C	SP	P
MIN	86.302	46.08	4.86	20.17	I	C	SP	P
SES	86.341	33.57	4.86	20.17	I	C	SP	P
DBN	86.608	328.92	4.86	20.17	I	C	LP	P
OGA	87.039	322.45	4.82	20.00	I	C	SP	P
ENN	87.147	327.61	4.82	20.00	I	C	SP	P
FFC	87.410	26.62	4.80	19.91	I	C	SP	P
OSS	87.627	322.68	4.80	19.91	E	C	LP	P
SAX	87.700	323.46	4.80	19.91	E	C	LP	P
SLE	87.820	324.23	4.77	19.78	E	C	LP	P
ESK	87.840	334.73	4.77	19.78	I	C	SP	P
MHC	87.919	48.61	4.77	19.78	I	C	SP	P

Table 118. Station data for event 66 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
CDF	88.028	325.25	4.77	19.78	I	C	SP P
ZUL	88.055	324.05	4.77	19.78	E	C	LP P
VDL	88.115	322.81	4.77	19.78	E	C	LP P
LLS	88.126	323.32	4.77	19.78	E	C	LP P
FRB	88.143	7.51	4.77	19.78	I	C	SP P
ECH	88.216	325.15	4.77	19.78	I	C	SP P
TMA	88.676	322.78	4.75	19.70	E	C	LP P
MMK	89.197	323.14	4.73	19.61	E	C	LP P
FRI	89.397	48.04	4.71	19.52	I	C	SP P
DIX	89.473	323.41	4.71	19.52	E	C	LP P
MNA	89.585	46.16	4.71	19.52	I	C	SP P
EMS	89.733	323.62	4.71	19.52	E	C	LP P
DMU	90.315	335.46	4.70	19.48	I	C	SP P
DDK	90.502	334.87	4.70	19.48	I	C	SP P
DKM	90.576	334.75	4.70	19.48	I	C	SP P
LBF	90.642	325.67	4.70	19.48	I	C	SP P
DLE	90.657	334.91	4.70	19.48	I	C	SP P
LDF	91.487	328.75	4.68	19.39	I	C	SP P
GRR	91.974	328.96	4.67	19.35	I	C	SP P
LPF	92.318	328.81	4.66	19.31	I	C	SP P
RSON	93.602	25.27	4.63	19.18	E	C	LP P
RSSD	94.093	34.98	4.61	19.09	E	C	LP P

Table 119. Station data for event 90.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BAG	0.656	203.37	7.86	144.84	I	D	LP	P
PIP	1.320	350.38	11.43	123.11	I	C	SP	P
PGP	3.496	178.37	13.52	97.72	I	C	SP	P
TWQ	7.220	359.89	13.59	84.78	I	C	SP	P
ANP	8.148	4.26	13.53	82.40	E	C	LP	P
QZH	8.163	345.40	13.53	82.36	I	C	SP	P
DAV	10.893	154.37	13.25	76.22	I	C	LP	P
SSE	14.018	1.19	12.81	69.87	I	C	LP	P
KMI	18.713	298.56	10.38	49.52	I	D	LP	P
NST	19.927	269.12	10.23	48.58	I	D	SP	P
CD2	20.823	314.71	10.02	47.27	I	D	SP	P
BDT	20.881	273.85	10.01	47.19	I	D	SP	P
CHG	20.922	278.22	10.00	47.14	I	D	SP	P
TIY	21.907	341.87	9.82	46.03	I	D	SP	P
MKS	22.131	183.65	9.78	45.79	I	D	SP	P
BJI	23.296	350.89	9.60	44.70	E	D	LP	P
LZH	24.262	324.79	9.47	43.97	I	D	SP	P
SNY	24.835	4.86	9.42	43.66	I	D	SP	P
HHC	25.067	343.20	9.40	43.54	I	D	SP	P
BTO	25.297	340.43	9.38	43.40	I	D	SP	P
GTA	28.867	324.83	8.97	41.08	I	D	SP	P
KNA	33.477	166.09	8.62	39.15	I	D	SP	P
PKI	34.324	294.09	8.56	38.87	I	D	SP	P
KKN	34.476	294.43	8.56	38.82	I	D	SP	P
DMN	34.596	294.07	8.55	38.78	I	D	SP	P
MBL	37.947	181.54	8.35	37.71	I	D	SP	P
WB2	39.046	159.59	8.29	37.41	I	C	SP	P
NAU	39.658	187.76	8.25	37.22	I	D	SP	P
HYB	40.345	277.03	8.21	37.00	I	D	SP	P
ISQ	41.742	153.20	8.14	36.61	I	C	SP	P
ASPA	42.391	162.12	8.11	36.46	I	C	SP	P
KOD	42.629	266.68	8.10	36.39	I	D	SP	P
WBN	43.251	172.48	8.06	36.19	I	D	SP	P
MEK	43.419	183.00	8.05	36.14	I	D	SP	P
CTAO	44.515	144.89	7.99	35.85	I	C	SP	P
MRWA	46.195	185.88	7.89	35.33	I	D	SP	P
KLB	48.414	183.53	7.74	34.57	I	D	SP	P
NWAO	49.774	183.99	7.63	34.02	I	D	SP	P
STK	52.525	157.69	7.41	32.91	I	D	SP	P
MHI	57.186	302.48	7.06	31.15	I	D	LP	P
YOU	57.344	152.96	7.04	31.08	I	D	SP	P
KHJ	57.829	299.90	7.02	30.93	I	D	SP	P
WAM	59.186	153.72	6.91	30.42	I	D	SP	P
SHI	63.209	295.00	6.59	28.86	I	D	SP	P
TTA	71.887	28.55	5.90	25.62	I	D	SP	P
IMA	72.762	25.20	5.84	25.34	I	D	SP	P
OBN	72.953	323.33	5.83	25.27	I	D	SP	P
PMR	75.212	29.65	5.68	24.58	I	D	SP	P
COL	75.323	26.16	5.67	24.53	I	D	SP	P
FBA	75.323	26.16	5.67	24.53	I	D	SP	P

Table 119. Station data for event 90 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KEV	75.505	338.98	5.65	24.47	I	D	SP	P
KJF	76.198	333.25	5.61	24.28	I	D	SP	P
SUF	77.176	331.90	5.55	24.01	I	D	SP	P
JER	77.636	299.60	5.52	23.87	I	D	SP	P
NUR	78.371	329.85	5.47	23.64	I	D	SP	P
INK	79.973	21.32	5.33	22.97	I	D	SP	P
MBC	80.295	12.17	5.29	22.82	I	D	SP	P
PVL	82.597	312.74	5.12	22.02	I	D	SP	P
DIM	82.612	311.59	5.12	22.02	I	D	SP	P
PLD	83.224	311.83	5.08	21.85	I	D	SP	P
DEV	83.358	315.85	5.07	21.81	I	D	SP	P
DAG	83.391	351.36	5.07	21.80	I	D	SP	P
KRA	83.940	320.47	5.04	21.66	I	D	SP	P
SPC	84.036	319.58	5.03	21.63	I	D	SP	P
JOS	84.077	318.85	5.03	21.62	I	D	SP	P
MMB	84.072	311.55	5.03	21.62	I	D	SP	P
PSZ	84.673	318.45	4.99	21.46	I	D	SP	P
NAI	84.676	267.05	4.99	21.46	I	D	SP	P
VAY	84.982	311.56	4.97	21.37	I	D	SP	P
BUD	85.374	318.23	4.94	21.24	I	D	SP	P
SKO	85.580	312.45	4.93	21.16	I	D	SP	P
KSP	85.849	322.02	4.90	21.02	I	D	SP	P
ZST	86.333	319.36	4.86	20.84	I	D	SP	P
VKA	86.795	319.62	4.82	20.70	I	D	SP	P
PRU	87.211	321.66	4.80	20.59	I	D	SP	P
BRG	87.210	322.63	4.80	20.59	I	D	SP	P
CLL	87.576	323.27	4.78	20.50	I	D	SP	P
KHC	88.129	321.13	4.76	20.40	I	D	SP	P
HOF	88.642	322.60	4.74	20.30	I	D	SP	P
KBA	89.109	319.31	4.72	20.22	I	D	SP	P
BHG	89.133	320.03	4.72	20.22	I	D	SP	P
GRA1	89.291	322.28	4.71	20.21	I	D	SP	P
YKC	89.735	22.46	4.71	20.17	I	D	SP	P
FUR	89.921	320.89	4.70	20.15	I	D	SP	P
OGA	90.638	319.79	4.70	20.14	I	D	SP	P
OSS	91.261	319.90	4.69	20.09	I	D	SP	P
SAX	91.496	320.65	4.68	20.06	I	D	SP	P
VDL	91.767	319.93	4.67	20.01	I	D	SP	P
SLE	91.771	321.37	4.67	20.01	I	D	SP	P
LLS	91.882	320.42	4.67	20.00	I	D	SP	P
ZUL	91.966	321.15	4.66	19.98	I	D	SP	P
CDF	92.185	322.33	4.66	19.95	I	D	SP	P
TMA	92.309	319.78	4.65	19.94	I	D	SP	P
MMK	92.894	320.02	4.64	19.90	I	D	SP	P
DIX	93.220	320.23	4.63	19.85	I	D	SP	P
EMS	93.518	320.38	4.62	19.79	I	D	SP	P
LOR	94.751	322.48	4.58	19.61	I	D	SP	P
LBF	94.829	322.20	4.58	19.60	I	D	SP	P
SSF	95.065	322.43	4.57	19.55	I	D	SP	P
SMF	95.084	321.95	4.57	19.55	I	D	SP	P

Table 119. Station data for event 90 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
AVF	95.296	322.25	4.56	19.51	I	D	SP	P
EDM	95.982	29.37	4.54	19.43	I	D	SP	P
TCF	96.231	322.25	4.54	19.41	I	D	SP	P
LSF	96.649	322.47	4.53	19.37	I	D	SP	P
NEW	97.051	34.81	4.52	19.34	I	D	SP	P
RJF	97.170	321.67	4.52	19.33	I	D	SP	P
MFF	97.421	323.41	4.51	19.31	I	D	SP	P
BHO	118.624	33.87	1.88	7.90	I	D	SP	PKP
SJG	144.425	11.49	1.69	7.13	I	D	SP	PKP

Table 120. Station data for event 113.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
TWD	0.766	268.16	13.94	100.98	I	D	SP	P
TWZ	1.255	321.91	14.17	93.72	I	D	SP	P
TWF1	1.284	234.41	14.17	93.72	I	D	SP	P
ANP	1.358	322.30	14.18	93.03	I	D	SP	P
ISI	1.599	81.55	14.19	92.14	I	D	SP	P
QZH	3.596	284.17	14.17	93.72	I	D	SP	P
SSE	7.048	351.25	13.96	79.45	I	C	SP	P
BAG	7.851	193.13	13.88	77.82	E	C	LP	P
SEO	13.966	15.09	13.09	67.20	I	D	SP	P
DAV	17.187	169.39	12.55	62.11	E	C	LP	P
CD2	17.888	296.36	12.34	60.35	I	D	SP	P
KMI	17.938	277.31	12.34	60.35	I	D	LP	P
HHC	19.018	333.96	12.13	58.68	I	C	SP	P
BTO	19.468	330.58	10.55	47.98	I	C	SP	P
CN2	19.799	6.46	10.41	47.15	I	C	SP	P
CHG	22.475	260.98	9.83	43.81	I	D	SP	P
BDT	22.941	257.12	9.74	43.31	I	D	SP	P
GTA	24.453	313.96	9.52	42.10	I	C	SP	P
TRT	33.027	198.03	8.68	37.68	I	D	SP	P
PMG	41.139	141.15	8.21	35.32	I	C	SP	P
WB3	45.274	164.12	7.96	34.10	I	C	SP	P
ISQ	47.561	158.07	7.84	33.51	I	C	SP	P
CTA	49.675	150.14	7.69	32.79	I	C	SP	P
WBN	50.104	175.14	7.65	32.60	I	C	SP	P
MHI	54.886	298.42	7.25	30.70	I	C	LP	P
NWAO	56.923	185.22	7.10	30.00	E	C	LP	P
STK	58.602	160.91	6.99	29.49	I	C	SP	P
ADE	60.737	164.70	6.84	28.80	I	C	SP	P
YOU	63.075	156.02	6.63	27.83	I	C	SP	P
CAN	64.232	156.04	6.55	27.47	I	C	SP	P
WAM	64.966	156.57	6.47	27.11	I	C	SP	P
TOO	65.064	159.93	6.47	27.11	I	C	SP	P
MSL	67.857	301.12	6.22	25.98	I	D	SP	P
INK	72.872	22.18	5.85	24.33	I	C	SP	P
MBC	73.089	12.74	5.85	24.33	I	C	SP	P
DAG	76.638	351.47	5.61	23.27	I	C	SP	P
PSN	76.683	311.96	5.61	23.27	I	C	SP	P
JMB	78.216	311.24	5.52	22.88	I	D	SP	P
PVL	78.922	312.28	5.45	22.57	I	C	SP	P
DIM	79.062	311.13	5.45	22.57	I	D	SP	P
KRA	79.454	320.19	5.41	22.39	I	C	SP	P
SPC	79.638	319.31	5.41	22.39	I	C	SP	P
JOS	79.752	318.58	5.35	22.13	I	C	SP	P
KONO	80.230	331.64	5.35	22.13	E	D	LP	P
MMB	80.517	311.25	5.30	21.92	I	C	SP	P
COP	80.930	327.38	5.26	21.74	I	D	SP	P
SRO	81.391	318.61	5.21	21.52	I	C	SP	P
VAY	81.421	311.36	5.21	21.52	I	C	SP	P
SKO	81.918	312.32	5.17	21.35	I	C	SP	P
MUD	82.103	329.01	5.17	21.35	I	D	SP	P

Table 120. Station data for event 113 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
VKA	82.379	319.63	5.14	21.22	I	C	SP	P
SOP	82.506	319.04	5.14	21.22	I	C	SP	P
PRU	82.593	321.72	5.14	21.22	I	C	SP	P
RSNT	82.615	23.14	5.14	21.22	E	C	LP	P
YKC	82.658	23.11	5.14	21.22	I	C	SP	P
CLL	82.802	323.37	5.11	21.09	I	C	SP	P
KHC	83.559	321.27	5.08	20.96	I	C	SP	P
MOX	83.895	323.23	5.05	20.83	I	D	SP	P
HOF	83.921	322.86	5.05	20.83	I	C	SP	P
WET	83.950	321.51	5.05	20.83	I	C	SP	P
GRF	84.604	322.54	5.02	20.70	I	C	SP	P
BHG	84.665	320.28	5.02	20.70	I	C	SP	P
KBA	84.712	319.56	5.02	20.70	I	C	SP	P
FUR	85.365	321.21	4.96	20.44	I	C	SP	P
AKU	85.556	344.69	4.96	20.44	I	C	SP	P
GDH	86.875	358.56	4.83	19.89	I	C	SP	P
ZUL	87.374	321.67	4.80	19.76	I	C	SP	P
CDF	87.480	322.86	4.80	19.76	I	C	SP	P
XSO	87.827	332.07	4.77	19.63	I	C	SP	P
BSF	88.075	322.57	4.77	19.63	I	C	SP	P
HAU	88.223	322.88	4.77	19.63	I	C	SP	P
PNT	88.468	35.33	4.75	19.54	I	C	SP	P
EDM	89.116	29.82	4.73	19.46	I	C	SP	P
LOR	90.020	323.26	4.71	19.37	I	C	SP	P
LBF	90.124	322.99	4.71	19.37	I	C	SP	P
SSF	90.337	323.24	4.70	19.33	I	C	SP	P
SMF	90.402	322.77	4.70	19.33	I	C	SP	P
NEW	90.421	35.18	4.70	19.33	I	C	SP	P
AVF	90.584	323.09	4.70	19.33	I	C	SP	P
YKM	90.780	34.13	4.69	19.29	I	C	SP	P
DMU	90.892	332.70	4.69	19.29	I	C	SP	P
BGF	91.002	323.11	4.69	19.29	I	C	SP	P
DDK	91.012	332.15	4.69	19.29	I	C	SP	P
RXF	91.078	33.88	4.69	19.29	I	C	SP	P
DLE	91.169	332.17	4.69	19.29	I	C	SP	P
LHD	91.240	34.53	4.69	19.29	I	C	SP	P
MZF	91.355	322.95	4.68	19.24	I	C	SP	P
DCN	91.440	332.52	4.68	19.24	I	C	SP	P
ETA	91.441	331.60	4.68	19.24	I	C	SP	P
CLX	91.492	34.39	4.68	19.24	I	C	SP	P
ECP	91.873	331.30	4.67	19.20	I	C	SP	P
SES	92.071	30.98	4.67	19.20	I	C	SP	P
LPF	92.140	325.92	4.67	19.20	I	C	SP	P
CAF	92.432	322.15	4.66	19.16	I	C	SP	P
RJF	92.504	322.69	4.66	19.16	I	C	SP	P
FFC	92.748	23.98	4.66	19.16	I	C	SP	P
BMN	95.171	41.41	4.58	18.82	I	C	SP	P
TPM	121.093	47.07	1.87	7.58	I	C	SP	PKP
TOV	144.264	20.94	1.70	6.89	I	C	SP	PKP
CAR	144.409	15.95	1.70	6.89	I	C	SP	PKP

Table 121. Station data for event 123.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
NGO	0.962	206.28	13.82	100.92	I	C	SP P
NZJ	1.301	45.30	14.02	95.06	I	D	SP P
NAH	1.416	209.05	14.05	93.41	I	D	SP P
KMJ	1.847	232.98	14.12	90.00	I	D	SP P
MVJ	2.977	122.49	14.15	90.00	I	D	SP P
ANP	6.621	251.52	13.97	83.00	I	C	LP P
SEO	10.152	353.30	13.63	75.56	I	C	LP P
PGP	15.554	208.25	12.81	65.52	I	D	SP P
CGP	19.234	191.34	12.11	59.36	I	D	SP P
CHTO	28.409	258.69	9.09	40.23	E	C	LP P
CHG	28.409	258.69	9.09	40.23	I	C	SP P
NST	28.754	251.78	9.02	39.86	I	C	SP P
BDT	29.003	255.68	9.02	39.86	I	C	SP P
MKS	33.622	196.30	8.64	37.87	I	D	SP P
PPI	38.688	228.79	8.34	36.34	I	C	SP P
MTN	40.146	175.94	8.26	35.93	I	D	SP P
KNA	42.948	179.55	8.10	35.13	I	D	SP P
CTAO	50.309	158.07	7.61	32.73	E	D	LP P
CTA	50.309	158.07	7.61	32.73	I	D	SP P
POO	50.706	272.12	7.61	32.73	I	C	SP P
QUE	53.373	288.53	7.37	31.58	I	C	LP P
TTA	59.379	30.99	6.91	29.40	I	C	SP P
BRW	59.384	21.20	6.91	29.40	I	C	SP P
MUN	60.241	191.98	6.87	29.22	E	D	LP P
IMA	60.336	27.33	6.83	29.03	I	C	SP P
NWAQ	60.986	190.78	6.79	28.84	I	C	SP P
KDC	61.473	36.82	6.75	28.66	I	C	SP P
PMR	62.687	32.25	6.67	28.29	I	C	SP P
FBA	62.868	28.46	6.63	28.10	I	C	SP P
COL	62.868	28.46	6.63	28.10	I	C	LP P
COL	62.868	28.46	6.63	28.10	I	C	SP P
INK	67.691	23.45	6.26	26.41	I	C	SP P
KEV	68.371	338.47	6.18	26.05	I	C	LP P
MBC	68.594	13.77	6.18	26.05	I	C	SP P
ALE	70.122	1.50	6.06	25.50	I	C	SP P
TAU	72.139	165.54	5.92	24.87	E	D	LP P
UPP	76.319	330.95	5.61	23.49	I	C	SP P
VRI	78.350	315.69	5.48	22.91	I	C	SP P
PSN	78.420	313.22	5.48	22.91	I	C	SP P
JER	78.617	299.83	5.48	22.91	I	C	SP P
ISR	78.800	315.08	5.44	22.74	I	C	SP P
MLR	79.011	315.60	5.44	22.74	I	C	SP P
IST	79.071	310.54	5.44	22.74	I	C	LP P
PRNI	79.382	298.60	5.41	22.60	I	C	SP P
JMB	80.021	312.67	5.35	22.34	I	D	SP P
COZ	80.084	316.00	5.35	22.34	I	C	SP P
KRA	80.283	321.67	5.30	22.12	I	C	SP P
PVL	80.612	313.77	5.30	22.12	I	C	SP P
JOS	80.755	320.11	5.25	21.90	I	C	SP P
DIM	80.874	312.65	5.25	21.90	I	C	SP P

Table 121. Station data for event 123 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
COP	80.955	328.97	5.25	21.90	I	C	LP	P
KDZ	81.221	312.38	5.25	21.90	I	C	SP	P
PRK	81.755	309.91	5.17	21.55	I	C	SP	P
KSP	81.826	323.61	5.17	21.55	I	C	SP	P
MUD	81.940	330.72	5.17	21.55	I	C	SP	P
VTS	82.143	314.01	5.17	21.55	I	C	SP	P
MMB	82.307	312.93	5.14	21.42	I	C	SP	P
HLW	82.435	299.58	5.14	21.42	I	C	SP	P
PNT	82.557	37.75	5.14	21.42	I	C	SP	P
LON	82.728	40.73	5.14	21.42	I	C	LP	P
ZST	82.854	321.09	5.11	21.29	I	C	SP	P
BRG	83.033	324.49	5.11	21.29	I	C	SP	P
PRU	83.234	323.54	5.11	21.29	I	C	SP	P
VKA	83.251	321.44	5.08	21.16	I	C	SP	P
CLL	83.260	325.20	5.08	21.16	I	C	SP	P
EDM	83.459	32.24	5.08	21.16	I	C	SP	P
GDH	83.570	0.71	5.08	21.16	I	C	LP	P
ATH	84.123	309.79	5.05	21.03	I	C	SP	P
KZN	84.234	312.58	5.05	21.03	I	C	SP	P
KHC	84.243	323.20	5.05	21.03	I	C	SP	P
MOX	84.361	325.18	5.02	20.90	I	C	LP	P
HOF	84.428	324.82	5.02	20.90	I	C	SP	P
NEW	84.514	37.68	5.02	20.90	I	C	SP	P
WET	84.605	323.48	5.02	20.90	I	C	SP	P
GRFO	85.145	324.58	4.99	20.76	I	C	LP	P
GRF	85.142	324.58	4.99	20.76	I	C	SP	P
BHG	85.452	322.33	4.96	20.63	I	C	SP	P
KBA	85.578	321.63	4.96	20.63	I	C	SP	P
WDC	85.602	46.24	4.96	20.63	I	C	SP	P
FUR	86.045	323.34	4.90	20.37	I	C	SP	P
TRI	86.150	320.34	4.90	20.37	I	C	SP	P
SES	86.352	33.54	4.86	20.20	I	C	SP	P
BNS	86.357	327.21	4.86	20.20	I	C	SP	P
ORV	86.828	46.67	4.82	20.03	I	C	SP	P
ENN	87.086	327.58	4.82	20.03	I	C	SP	P
ELO	87.106	335.67	4.82	20.03	I	C	SP	P
ESY	87.112	334.85	4.82	20.03	I	C	SP	P
BKS	87.262	48.39	4.80	19.94	I	C	SP	P
EBL	87.381	334.93	4.80	19.94	I	C	SP	P
FFC	87.412	26.59	4.80	19.94	I	C	SP	P
EAU	87.482	335.15	4.80	19.94	I	C	SP	P
CDF	87.965	325.22	4.77	19.81	I	C	SP	P
SAL	88.023	321.63	4.77	19.81	I	C	SP	P
DOU	88.167	327.64	4.77	19.81	E	C	LP	P
JAS1	88.432	47.56	4.75	19.72	I	C	SP	P
BSF	88.589	324.99	4.75	19.72	I	C	SP	P
HAU	88.701	325.31	4.75	19.72	I	C	SP	P
ORO	89.398	322.78	4.71	19.55	I	C	SP	P
EMS	89.669	323.59	4.71	19.55	E	C	LP	P
LBF	90.579	325.63	4.70	19.51	I	C	SP	P

Table 121. Station data for event 123 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
SSF	90.762	325.91	4.69	19.46	I	C	SP P
CVF	90.858	320.01	4.69	19.46	I	C	SP P
SMF	90.879	325.45	4.69	19.46	I	C	SP P
LDF	91.426	328.72	4.68	19.42	I	C	SP P
BGF	91.437	325.85	4.68	19.42	I	C	SP P
FRF	91.463	321.82	4.68	19.42	I	C	SP P
FLN	91.470	329.01	4.68	19.42	I	C	SP P
LMR	91.687	321.72	4.68	19.42	I	C	SP P
LRG	91.690	321.88	4.68	19.42	I	C	SP P
MZF	91.806	325.73	4.67	19.38	I	C	SP P
GRR	91.914	328.93	4.67	19.38	I	C	SP P
LPF	92.257	328.77	4.66	19.33	I	C	SP P
LSF	92.305	326.27	4.66	19.33	I	C	SP P
CAF	92.965	325.06	4.64	19.25	I	C	SP P
RJF	92.977	325.60	4.64	19.25	I	C	SP P
RSON	93.602	25.23	4.63	19.21	I	C	LP P
LFF	93.624	325.73	4.63	19.21	I	C	SP P
RSSD	94.106	34.95	4.61	19.12	I	C	LP P
ANMO	99.103	42.90	4.48	18.56	I	C	LP P
SPA	117.300	180.00	1.88	7.67	I	C	SP PKP

Table 122. Station data for event 147.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BAG	1.061	358.43	7.49	145.25	I	C	LP	P
TWF1	7.991	4.55	13.11	86.86	I	C	SP	P
DAV	9.539	148.78	13.02	82.68	I	C	LP	P
ANP	9.825	4.82	13.01	82.11	I	C	SP	P
ANP	9.825	4.82	13.01	82.11	I	C	LP	P
QIZ	10.922	291.13	12.91	79.38	I	D	SP	P
NAH	12.674	30.28	12.70	75.29	I	C	SP	P
NGO	13.131	30.34	12.64	74.26	I	C	SP	P
SSE	15.686	1.83	12.26	68.96	I	C	LP	P
BKB	16.890	192.81	11.42	60.39	I	C	SP	P
MKS	20.457	183.25	9.95	49.28	I	C	SP	P
CHG	20.994	282.54	9.85	48.62	I	D	SP	P
SNG	21.206	249.71	9.82	48.38	I	D	LP	P
KOC	21.574	30.54	9.76	47.99	I	D	SP	P
KGM	21.591	233.83	9.75	47.97	I	D	SP	P
SEO	22.838	13.10	9.57	46.78	I	C	SP	P
SEO	22.838	13.10	9.57	46.78	E	D	LP	P
TIY	23.426	343.52	9.49	46.29	I	D	SP	P
DL2	23.487	1.99	9.48	46.24	I	D	SP	P
GUA	23.600	91.24	9.47	46.16	E	D	LP	P
LZH	25.512	327.14	9.30	45.08	I	D	SP	P
MAT	26.295	33.35	9.22	44.61	I	D	SP	P
SNY	26.512	4.97	9.20	44.49	I	D	SP	P
CN2	28.659	7.32	8.92	42.80	I	D	SP	P
GTA	30.113	326.75	8.80	42.08	I	D	SP	P
PKI	34.823	296.35	8.50	40.36	I	D	SP	P
KKN	34.985	296.67	8.50	40.31	I	D	SP	P
DMN	35.094	296.30	8.49	40.28	I	D	SP	P
WMQ	39.852	322.13	8.21	38.72	I	D	SP	P
HYB	40.347	278.94	8.18	38.55	I	D	SP	P
NDI	42.136	295.87	8.09	38.02	I	D	SP	P
CTAO	43.300	143.62	8.03	37.67	I	C	LP	P
POO	44.752	280.96	7.95	37.26	I	D	SP	P
KSH	45.732	310.57	7.89	36.93	I	D	SP	P
HNR	46.095	119.77	7.87	36.82	I	C	LP	P
NWAO	48.098	183.82	7.73	36.06	I	C	LP	P
STK	51.080	156.95	7.50	34.83	I	C	SP	P
MHI	57.896	303.38	6.98	32.13	I	D	LP	P
KHI	58.469	300.80	6.94	31.89	I	D	SP	P
ADK	61.277	38.92	6.71	30.74	I	D	SP	P
TAU	62.940	158.23	6.58	30.07	I	C	LP	P
TEH	64.450	302.52	6.46	29.46	I	D	SP	P
IR2	64.848	302.45	6.43	29.30	I	D	SP	P
TAB	68.425	305.21	6.13	27.83	I	D	LP	P
AFI	72.900	110.05	5.81	26.26	E	D	LP	P
BRW	73.218	19.52	5.79	26.17	I	D	SP	P
IMA	74.367	24.99	5.71	25.79	I	D	SP	P
SNZO	75.321	140.89	5.65	25.46	I	C	LP	P
ARO	75.367	278.14	5.64	25.45	I	D	SP	P
HON	76.713	71.30	5.56	25.06	E	D	LP	P

Table 122. Station data for event 147 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
COL	76.919	25.96	5.55	25.00	I	D	LP P
KBS	78.572	349.22	5.44	24.45	I	D	SP P
KBS	78.572	349.22	5.44	24.45	I	D	LP P
TRO	79.754	339.61	5.32	23.89	I	D	SP P
ALT	80.885	307.95	5.21	23.39	I	D	SP P
CFR	80.989	314.32	5.20	23.35	I	D	SP P
YLV	81.116	309.56	5.19	23.30	I	D	SP P
TLB	81.203	313.75	5.19	23.27	I	D	SP P
ISK	81.240	310.11	5.19	23.26	I	D	SP P
CLI	81.280	315.80	5.19	23.26	I	D	SP P
PSN	81.298	312.83	5.18	23.25	I	D	SP P
CTT	81.686	310.29	5.16	23.14	I	D	SP P
VRI	81.813	315.22	5.15	23.10	I	D	SP P
DST	81.886	308.74	5.15	23.08	I	D	SP P
HLW	81.899	298.67	5.15	23.08	I	D	SP P
KCT	81.943	309.42	5.14	23.07	I	D	SP P
MBC	81.970	12.08	5.14	23.06	I	D	SP P
EDC	82.288	309.61	5.12	22.97	I	D	SP P
BUC1	82.655	313.85	5.10	22.86	I	D	SP P
JMB	82.721	311.91	5.10	22.84	I	D	SP P
DIM	83.544	311.69	5.05	22.61	I	D	SP P
PVL	83.557	312.84	5.05	22.60	I	D	SP P
EZN	83.559	309.39	5.05	22.60	I	D	SP P
WAR	83.770	322.41	5.03	22.52	E	D	LP P
KDZ	83.816	311.34	5.03	22.51	I	D	SP P
NAI	84.361	267.14	4.99	22.34	I	D	SP P
DEV	84.391	315.92	4.99	22.33	I	D	SP P
SIT	84.718	32.16	4.97	22.24	I	D	SP P
KRA	85.076	320.52	4.95	22.13	I	D	SP P
VTS	85.100	312.70	4.94	22.12	I	D	SP P
SPC	85.152	319.63	4.94	22.10	I	D	SP P
PSZ	85.765	318.49	4.88	21.81	I	D	SP P
ATH	86.012	308.14	4.86	21.72	I	D	SP P
BUD	86.460	318.26	4.83	21.56	I	D	SP P
SKO	86.532	312.47	4.82	21.54	I	D	SP P
SRO	86.807	318.73	4.80	21.46	I	D	SP P
KONO	87.089	331.66	4.79	21.39	I	D	SP P
OHR	87.251	311.80	4.78	21.35	I	D	SP P
COP	87.352	327.40	4.78	21.33	E	D	LP P
COP	87.352	327.40	4.78	21.33	I	D	SP P
ZST	87.444	319.36	4.77	21.31	I	D	SP P
VKA	87.912	319.61	4.75	21.23	I	D	SP P
SOP	87.966	319.01	4.75	21.22	I	D	SP P
BRN	88.222	324.21	4.74	21.17	I	D	SP P
PRU	88.372	321.64	4.74	21.14	I	D	SP P
BER	88.653	333.30	4.72	21.09	I	D	SP P
MUD	88.688	328.88	4.72	21.08	I	D	SP P
CLL	88.770	323.24	4.72	21.05	I	D	SP P
KHC	89.279	321.09	4.71	21.02	I	D	SP P
KMR	89.350	319.95	4.71	21.02	I	D	LP P

Table 122. Station data for event 147 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
HAM	89.602	325.98	4.71	21.01	I	D	SP P
WET	89.695	321.28	4.71	21.01	I	D	SP P
HOF	89.823	322.61	4.70	20.99	I	D	SP P
MOX	89.840	322.98	4.70	20.99	I	D	SP P
LJU	89.856	317.98	4.70	20.98	I	D	SP P
BRT	89.900	312.47	4.70	20.98	I	D	SP P
KBA	90.219	319.25	4.70	20.96	I	D	SP P
VOY	90.273	318.14	4.70	20.96	I	D	SP P
GRFO	90.468	322.22	4.69	20.94	E	D	LP P
GRF	90.465	322.22	4.69	20.95	I	D	SP P
TRI	90.480	317.88	4.69	20.94	I	D	SP P
ORI	90.728	311.89	4.69	20.92	I	D	SP P
FUR	91.064	320.81	4.68	20.87	I	D	SP P
SGO	91.360	312.68	4.67	20.84	I	D	SP P
DUI	91.549	313.94	4.67	20.83	I	D	SP P
WIT	91.648	326.29	4.67	20.82	I	D	SP P
WTS	91.956	325.52	4.66	20.80	I	D	SP P
AQU	92.013	314.88	4.66	20.79	I	D	SP P
STU	92.059	321.95	4.66	20.78	I	D	LP P
BNS	92.236	324.50	4.65	20.76	I	D	SP P
MNS	92.493	315.12	4.64	20.71	I	D	SP P
DBN	92.791	326.10	4.64	20.68	E	D	LP P
GWF	92.896	322.60	4.63	20.67	I	D	SP P
ENN	93.028	324.70	4.63	20.65	I	D	SP P
WLF	93.426	323.66	4.61	20.57	E	D	LP P
UCC	93.879	325.21	4.60	20.49	E	D	LP P
DOU	94.098	324.53	4.59	20.46	I	D	LP P
ORO	94.201	319.49	4.59	20.45	I	D	SP P
GDH	95.535	357.91	4.55	20.28	I	D	LP P
GDH	95.535	357.91	4.55	20.28	I	D	SP P
BUL	96.983	251.09	4.52	20.13	I	D	SP P
SLR	98.562	245.70	4.48	19.94	I	D	LP P
SLR	98.562	245.70	4.48	19.94	I	D	SP P
BPI	98.880	245.32	4.47	19.92	I	D	SP P
YKM	98.971	33.81	4.47	19.91	I	D	SP P
PRY	99.529	244.68	4.45	19.80	I	D	SP P
CLX	99.666	34.12	4.45	19.79	I	D	SP P
SEK	99.693	243.28	4.44	19.78	I	D	SP P
VIR	100.300	243.66	4.44	19.76	I	D	SP Pdf
BNG	100.419	277.53	4.44	19.76	I	D	SP Pdf
BLF	101.089	242.76	4.44	19.76	I	D	SP Pdf
SWZ	101.456	244.83	4.44	19.76	I	D	SP Pdf
PTO	106.765	322.32	1.89	8.28	I	D	LP Pdf
BHO	120.138	33.72	1.87	8.20	I	D	SP PKP
BLA	124.105	20.25	1.87	8.17	I	D	LP PKP
SJG	146.101	11.58	1.66	7.25	I	D	SP PKP
UPA	148.658	40.85	1.59	6.97	E	D	LP PKP
CAR	153.257	16.66	1.45	6.33	I	D	SP PKP
BOG	155.409	37.36	1.37	5.97	I	D	LP PKP
PEL	159.534	151.97	1.18	5.18	I	D	SP PKP

Table 122. Station data for event 147 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
RDJ	162.987	241.35	1.01	4.42	I	D	SP	PKP

Table 123. Station data for event 179.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
MAN	2.387	158.79	14.26	56.77	I	D	SP	P
PPR	7.220	191.49	14.02	55.32	I	D	SP	P
MAP	7.505	150.09	13.97	55.03	I	D	SP	P
ANP	8.334	8.35	13.88	54.51	I	C	LP	P
CGP	9.474	151.81	13.77	55.87	I	D	SP	P
DAV	11.082	150.99	13.59	52.86	E	C	LP	P
KKM	11.466	200.27	13.52	52.47	I	D	SP	P
LOE	17.646	274.35	12.50	47.16	I	D	SP	P
KM1	18.213	299.59	12.40	46.67	E	D	LP	P
FKK	18.974	27.03	12.19	45.65	I	C	SP	P
NST	19.289	269.23	10.61	38.49	I	D	SP	P
NNT	20.234	260.53	10.46	37.85	I	D	SP	P
BDT	20.254	274.08	10.33	37.30	I	D	SP	P
CHG	20.309	278.58	10.33	37.30	I	D	LP	P
SNG	21.418	245.53	10.07	36.21	I	D	LP	P
SEO	21.436	14.88	10.07	36.21	I	C	LP	P
TYK	22.682	32.32	9.86	35.34	I	C	SP	P
BJ1	23.317	352.20	9.69	34.64	I	C	LP	P
PSI	25.215	238.24	9.48	33.79	I	D	SP	P
MAT	25.251	35.74	9.43	33.58	I	C	SP	P
TRT	25.557	197.57	9.43	33.58	I	C	SP	P
KNA	33.523	164.92	8.65	30.49	I	C	SP	P
PK1	33.792	294.44	8.62	30.37	I	D	SP	P
KKN	33.946	294.78	8.62	30.37	I	D	SP	P
DMN	34.063	294.41	8.62	30.37	I	D	SP	P
NAU	39.462	186.82	8.30	29.13	I	C	SP	P
ND1	41.110	294.37	8.21	28.79	I	D	SP	P
KOD	41.986	266.58	8.16	28.60	I	D	SP	P
ASPA	42.481	161.22	8.13	28.48	I	C	SP	P
POO	44.078	279.36	8.05	28.18	I	D	SP	P
CTA	44.790	144.11	7.99	27.95	I	C	SP	P
MUN	48.741	184.50	7.79	27.19	I	C	SP	P
NWAO	49.617	183.26	7.70	26.85	I	C	SP	P
RKG	50.767	183.40	7.58	26.40	I	C	SP	P
BRS	54.193	143.80	7.34	25.50	I	C	SP	P
ADE	54.493	161.31	7.30	25.35	I	C	SP	P
KHI	57.335	299.98	7.07	24.50	I	D	SP	P
NOU	59.741	129.23	6.92	23.95	I	C	SP	P
ARO	74.751	277.63	5.71	19.57	I	D	SP	P
KEV	75.386	338.95	5.68	19.46	E	C	LP	P
COL	75.708	26.10	5.68	19.46	E	C	LP	P
SUF	76.979	331.85	5.58	19.11	I	C	SP	P
NUR	78.151	329.78	5.52	18.89	E	C	LP	P
PSN	79.949	312.57	5.36	18.33	I	C	SP	P
HLW	80.802	298.37	5.26	17.97	I	C	SP	P
MLR	81.055	314.75	5.26	17.97	I	C	SP	P
JMB	81.386	311.67	5.22	17.83	I	C	SP	P
PVL	82.208	312.61	5.18	17.69	I	D	SP	P
MMB	83.672	311.41	5.09	17.37	I	C	SP	P
VTS	83.753	312.50	5.05	17.23	I	D	SP	P

Table 123. Station data for event 179 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
NAI	84.035	266.86	5.05	17.23	E	C	LP P
BUD	85.036	318.09	4.99	17.02	I	D	SP P
SKO	85.188	312.29	4.99	17.02	I	C	SP P
COP	85.830	327.26	4.91	16.74	I	C	SP P
COP	85.830	327.26	4.91	16.74	E	C	LP P
VIE	86.449	319.43	4.86	16.56	I	D	LP P
VKA	86.470	319.46	4.86	16.56	I	D	SP P
SOP	86.532	318.86	4.86	16.56	I	D	SP P
CLL	87.287	323.10	4.80	16.35	I	D	SP P
KHC	87.820	320.95	4.77	16.25	I	D	SP P
TRI	89.060	317.76	4.73	16.11	I	C	SP P
STU	90.590	321.85	4.70	16.00	E	C	LP P
PNT	95.551	34.63	4.56	15.51	I	C	SP P
LSZ	96.190	255.98	4.55	15.48	I	C	SP P
BNG	99.811	277.68	4.47	15.20	I	C	SP P
SJG	144.660	10.45	1.68	5.67	E	C	LP PKP
UPA	147.728	38.63	1.62	5.44	E	C	LP PKP

Figure 47. Azimuthal equidistant map for geographic subdivision,
Central Asia

FIRST MOTION FM LOCATIONS
1984–1985
CENTRAL ASIA

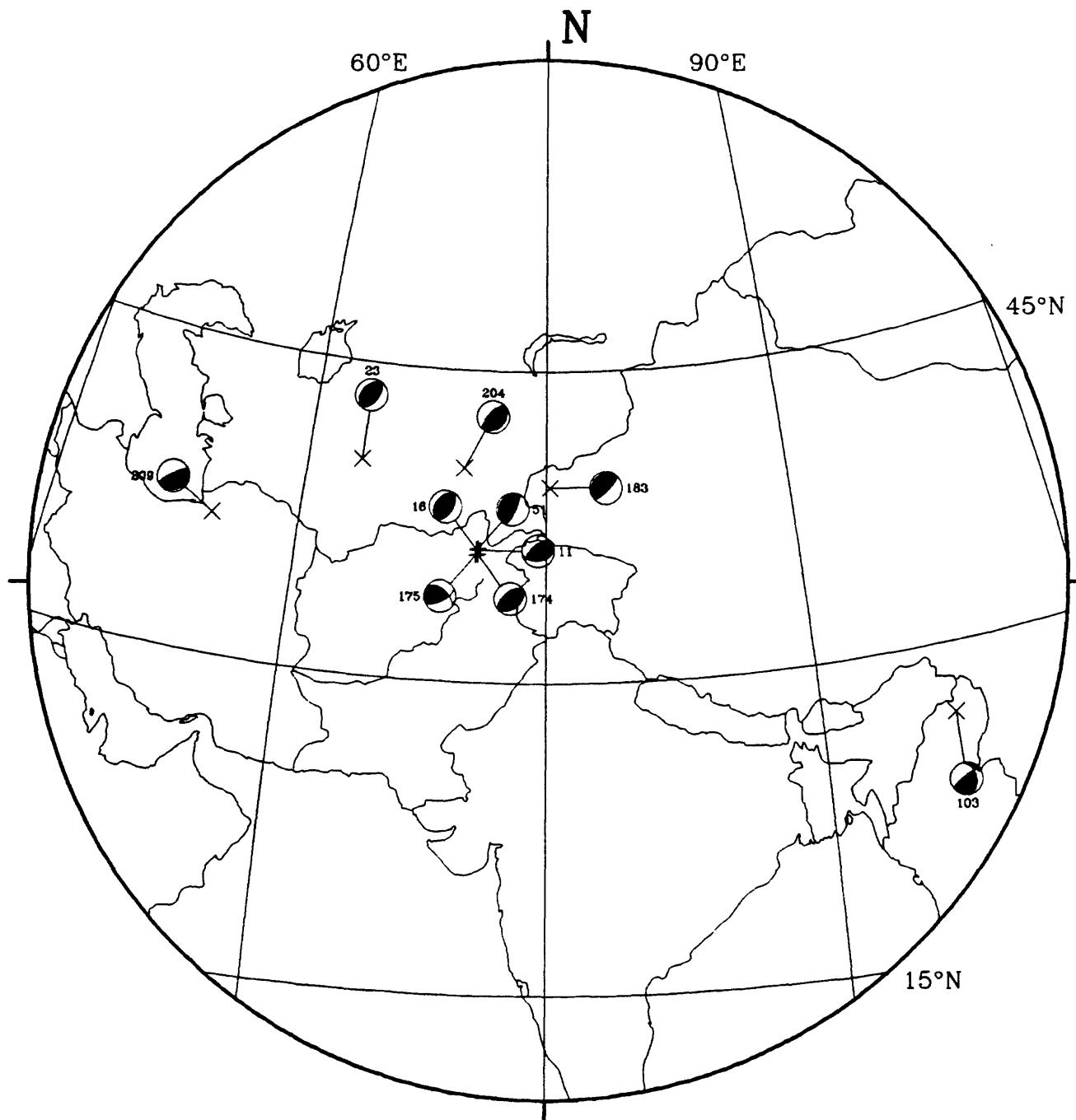
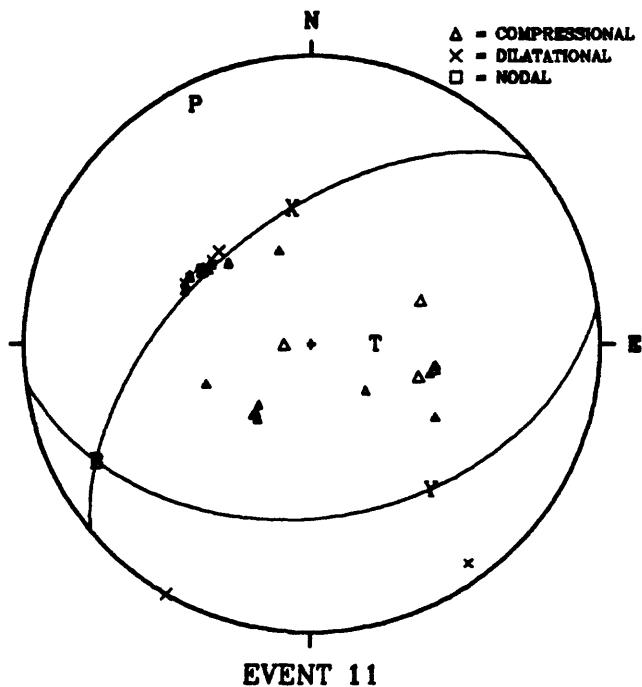


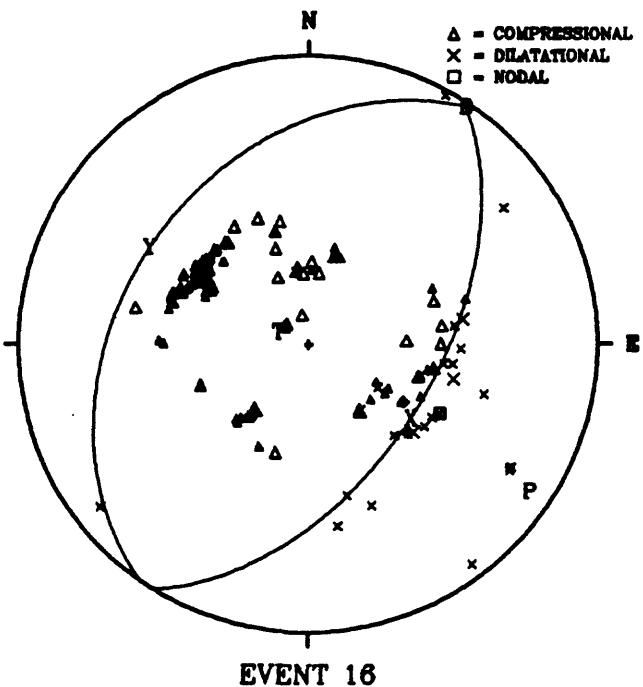
Table 124. Focal mechanism parameters for subdivision,
Central Asia

EVENT #	NODAL PLANE 1 (DEG)			NODAL PLANE 2 (DEG)			T AXIS (DEG)		P AXIS (DEG)		B AXIS (DEG)	
	ϑ	δ	λ	ϑ	δ	λ	PLG	AZM	PLG	AZM	PLG	AZM
11	230	55	70	82	40	116	72	89	8	334	16	242
16	32	54	88	215	36	93	81	293	9	123	2	33
23	40	55	90	220	35	90	80	310	10	130	0	40
51	25	75	90	205	15	90	60	295	30	115	0	25
103	233	73	125	346	38	28	50	182	20	297	33	41
174	232	53	90	52	37	90	82	142	8	322	0	52
175	63	63	43	310	53	145	49	281	6	184	41	89
183	45	75	90	225	15	90	60	315	30	135	0	45
204	223	63	90	43	27	90	72	133	18	313	0	43
209	245	75	90	65	15	90	60	155	30	335	0	65

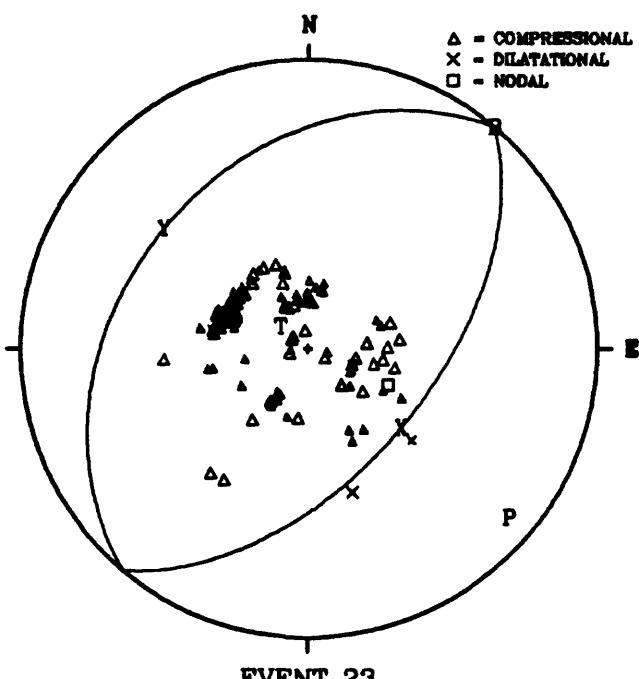
Figure 48. Lower hemisphere focal sphere projection for events 11, 16, 23, and 51.



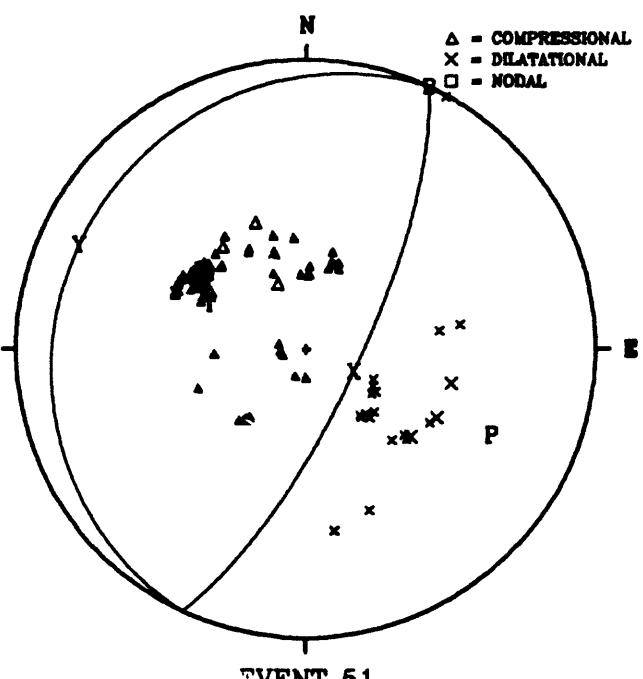
EVENT 11



EVENT 16



EVENT 23



EVENT 51

Figure 49. Lower hemisphere focal sphere projection for events 103, 174, 175, and 183.

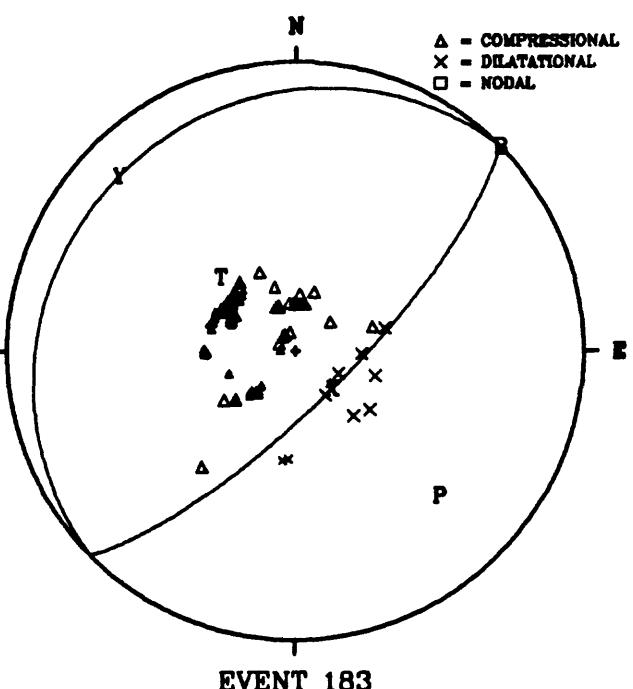
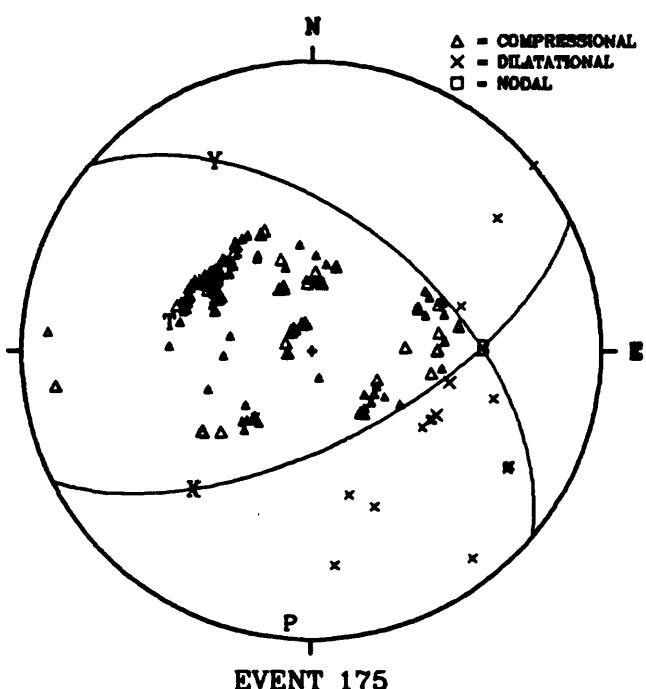
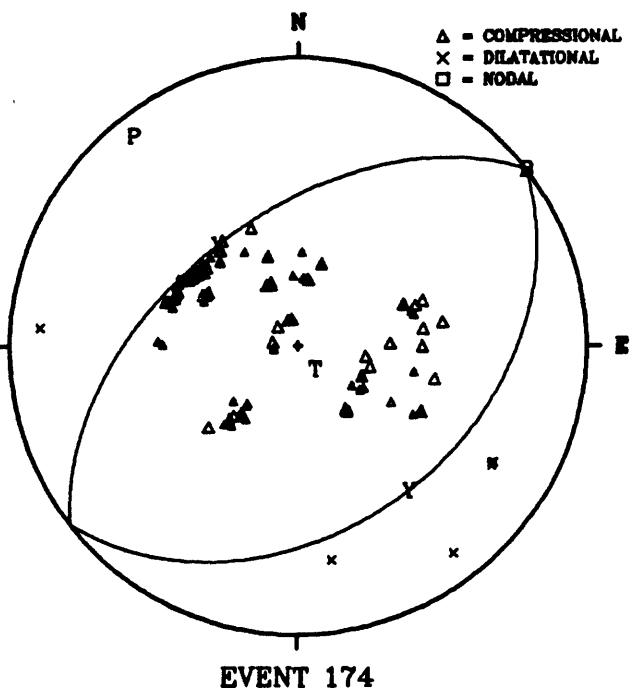
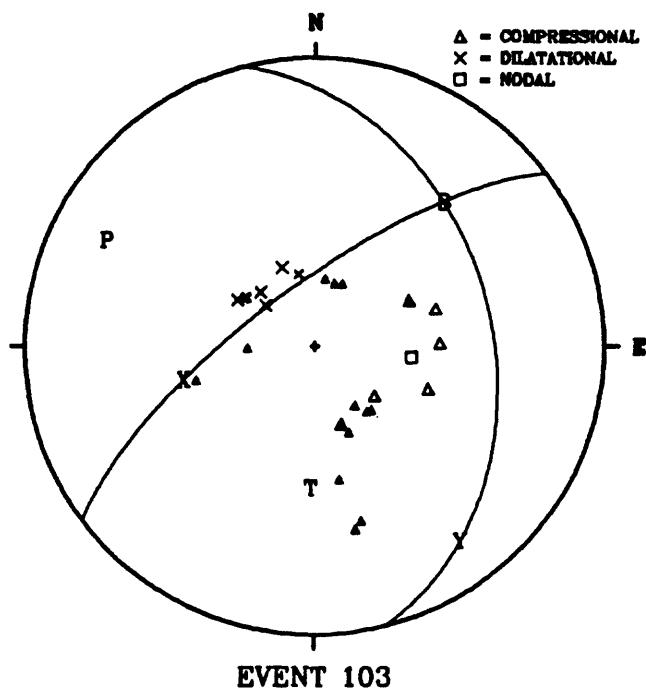


Figure 50. Lower hemisphere focal sphere projection for events 204, and 209.

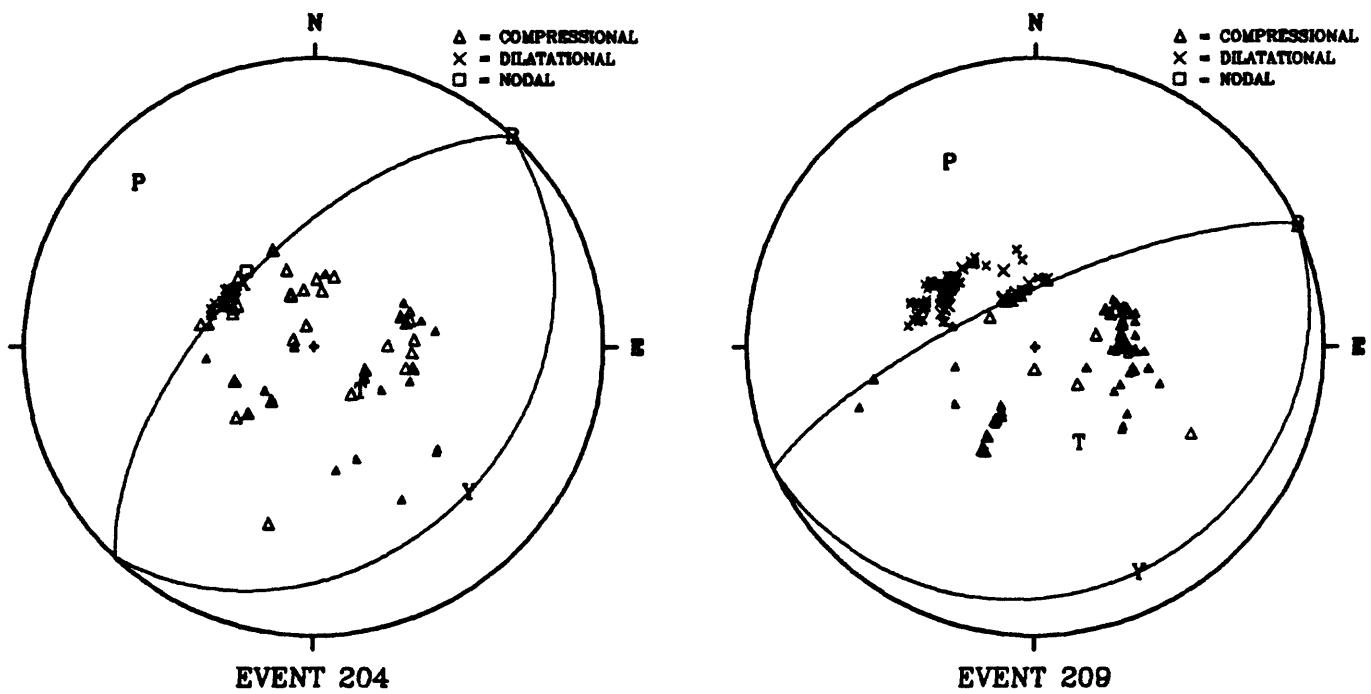


Table 125. Station data for event 11.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
QUE	7.066	210.09	13.24	90.00	I	D	LP	P
NDI	9.286	144.09	13.13	82.77	I	D	SP	P
BDT	31.234	120.19	8.73	41.23	I	C	SP	P
PSN	33.313	296.04	8.59	40.46	I	D	SP	P
VR1	34.310	300.01	8.54	40.19	I	C	SP	P
MLR	34.862	299.35	8.51	40.00	I	C	SP	P
CMP	35.505	298.99	8.47	39.78	I	D	SP	P
PVL	35.537	295.34	8.47	39.77	I	C	SP	P
COZ	35.994	299.12	8.44	39.61	I	C	SP	P
MMB	36.772	292.92	8.39	39.35	I	C	SP	P
JOS	38.513	304.48	8.29	38.77	I	C	SP	P
KMR	42.811	304.20	8.06	37.52	I	D	LP	P
BRN	43.112	310.65	8.04	37.42	I	D	SP	P
KBA	43.454	302.87	8.02	37.30	I	D	SP	P
WET	43.529	305.90	8.02	37.28	I	D	SP	P
COP	43.541	315.43	8.02	37.28	E	D	LP	P
BHG	43.686	303.85	8.01	37.24	I	D	SP	P
GRF	44.551	306.85	7.97	37.00	I	D	SP	P
FUR	44.698	304.68	7.96	36.95	I	C	SP	P
BNS	46.972	309.05	7.82	36.22	I	D	SP	P
GWF	46.980	306.30	7.82	36.22	I	C	SP	P
SZP	47.329	99.77	7.80	36.11	I	C	SP	P
BAG	48.062	100.95	7.75	35.81	E	C	LP	P
PGP	50.029	103.79	7.59	34.97	I	C	SP	P
MAT	52.972	68.41	7.35	33.74	I	C	LP	P
DDK	54.649	314.22	7.22	33.04	I	C	SP	P
DLE	54.793	314.14	7.21	32.98	I	C	SP	P
DMU	54.843	314.93	7.20	32.96	I	C	SP	P
DCN	55.202	314.35	7.18	32.83	I	C	SP	P
DAV	57.521	106.61	7.01	31.97	E	C	LP	P
BNG	57.637	249.44	7.00	31.93	I	C	SP	P
GDH	67.130	341.42	6.24	28.12	I	C	SP	P
JOZ	73.324	215.68	5.78	25.90	I	C	SP	P
SLR	73.773	219.62	5.75	25.76	I	C	SP	P
SEK	76.224	218.60	5.60	25.01	I	C	SP	P
BLF	77.592	219.19	5.50	24.57	I	C	SP	P
SUR	82.985	220.94	5.08	22.57	I	C	SP	P
ADE	94.885	130.31	4.56	20.17	I	C	SP	P
CYA	142.948	269.72	1.72	7.46	I	C	LP	P

Table 126. Station data for event 16.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
KSH	5.070	51.91	12.78	100.23	I	D	SP P
QUE	7.019	208.62	12.98	91.75	I	D	SP P
NDI	9.418	143.30	12.92	84.26	I	D	SP P
WMQ	14.852	55.04	12.31	71.41	I	D	SP P
DMN	14.956	121.98	12.29	71.21	I	D	SP P
KKN	14.961	121.06	12.29	71.19	I	D	SP P
PKI	15.188	121.44	12.26	70.73	I	D	SP P
POO	18.026	170.69	10.45	53.57	I	D	SP P
LSA	18.294	105.68	10.39	53.12	I	D	SP P
TAB	19.563	282.16	10.09	50.97	I	C	LP P
HYB	20.136	158.11	9.98	50.20	I	D	SP P
GTA	23.020	73.77	9.52	47.13	I	C	SP P
LZH	26.560	80.82	9.18	44.97	I	D	LP P
KOD	26.764	165.36	9.16	44.84	I	D	SP P
CD2	27.872	91.75	9.00	43.85	I	D	SP P
KM1	29.518	103.43	8.83	42.87	I	D	LP P
JER	29.759	271.53	8.81	42.75	I	C	SP P
CHTO	30.311	117.81	8.78	42.53	E	N	LP P
CHG	30.311	117.81	8.78	42.53	I	D	LP P
XAN	31.078	83.00	8.72	42.20	I	D	SP P
GPA	31.810	289.46	8.67	41.89	I	C	SP P
GYA	31.994	97.84	8.66	41.81	I	D	SP P
IST	32.725	291.07	8.61	41.55	I	C	LP P
DST	33.178	288.50	8.59	41.40	I	C	SP P
NST	33.261	120.71	8.58	41.37	I	D	SP P
HLW	33.533	270.32	8.56	41.27	I	C	SP P
YER	33.876	284.19	8.54	41.14	I	C	SP P
VRI	34.145	299.96	8.53	41.05	I	C	SP P
ISR	34.277	298.66	8.52	40.99	I	C	SP P
IZM	34.424	286.67	8.51	40.95	I	C	SP P
CVO	34.530	299.88	8.50	40.92	I	C	SP P
MLR	34.695	299.30	8.50	40.87	I	C	SP P
PCT	34.834	120.45	8.49	40.86	I	D	SP P
NNT	35.185	125.01	8.48	40.76	I	D	SP P
CMP	35.339	298.94	8.47	40.69	I	C	SP P
MMB	36.602	292.83	8.39	40.26	I	C	SP P
VTS	36.865	294.59	8.37	40.16	I	C	SP P
ATH	37.246	286.91	8.35	40.03	I	C	SP P
VAY	37.502	292.60	8.34	39.94	I	C	SP P
SUF	37.909	328.17	8.31	39.80	I	C	LP P
SKO	38.243	293.85	8.29	39.69	I	C	SP P
JOS	38.351	304.44	8.28	39.65	I	C	SP P
SPC	38.540	305.56	8.27	39.59	I	C	SP P
SNG	39.835	129.68	8.21	39.20	I	D	LP P
HKC	39.984	98.40	8.20	39.15	I	D	SP P
SNY	40.745	65.72	8.16	38.91	I	C	SP P
KEV	40.816	338.36	8.16	38.91	I	C	LP P
SSE	41.825	82.17	8.10	38.57	E	C	LP P
IPM	42.119	131.61	8.08	38.49	I	D	SP P
PRU	42.225	306.96	8.08	38.46	I	C	SP P

Table 126. Station data for event 16 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
ORI	42.312	292.03	8.08	38.46	I	C	SP P
BRG	42.557	308.31	8.06	38.39	I	C	LP P
KMR	42.649	304.14	8.06	38.36	I	C	LP P
KHC	42.914	305.77	8.04	38.27	I	C	SP P
BRN	42.958	310.61	8.04	38.25	I	C	SP P
CLL	43.128	309.00	8.03	38.20	I	C	SP P
RBL	43.222	301.85	8.02	38.16	I	C	SP P
WET	43.369	305.85	8.01	38.11	I	C	SP P
COP	43.395	315.40	8.01	38.10	I	C	LP P
DUI	43.430	294.83	8.01	38.09	I	C	SP P
SGG	43.548	294.46	8.00	38.06	I	C	SP P
MOX	44.049	308.12	7.98	37.94	I	C	LP P
AQU	44.052	296.05	7.98	37.94	I	C	SP P
SEO	44.277	70.95	7.97	37.87	I	C	LP P
GRF	44.392	306.79	7.96	37.83	I	C	SP P
GRFO	44.396	306.79	7.96	37.83	I	C	LP P
ANP	44.513	89.84	7.96	37.79	I	C	LP P
MNS	44.568	296.26	7.95	37.77	I	C	SP P
TATO	44.584	90.12	7.95	37.76	I	C	LP P
CTI	44.598	301.58	7.95	37.76	I	C	SP P
RDP	44.681	295.38	7.95	37.73	I	C	SP P
GAP	44.774	303.68	7.94	37.70	I	C	SP P
HAM	44.895	312.25	7.93	37.66	I	C	SP P
KONO	45.054	321.02	7.92	37.61	I	C	LP P
MUD	45.227	316.51	7.91	37.55	I	C	SP P
SAL	45.448	301.16	7.90	37.47	I	C	SP P
OSS	45.520	302.72	7.90	37.45	I	C	LP P
KGM	45.532	131.21	7.89	37.45	I	C	SP P
STU	45.825	305.74	7.88	37.35	I	C	LP P
SAX	45.964	303.62	7.87	37.30	I	C	LP P
VDL	46.013	302.55	7.87	37.29	I	C	LP P
LLS	46.265	303.16	7.85	37.20	I	C	LP P
SLE	46.446	304.46	7.84	37.14	I	C	LP P
TMA	46.490	302.14	7.84	37.13	I	C	LP P
ZUL	46.564	304.09	7.83	37.10	I	C	LP P
VG1	46.572	300.51	7.83	37.10	I	C	SP P
BNS	46.816	308.99	7.82	37.02	I	C	SP P
BGG	46.818	307.94	7.82	37.02	I	C	SP P
GWF	46.821	306.24	7.82	37.02	I	C	SP P
WIT	46.904	311.56	7.81	36.99	I	C	SP P
WTS	46.912	310.44	7.81	36.99	I	C	SP P
STB	47.078	308.53	7.80	36.93	I	C	SP P
MMK	47.120	302.24	7.80	36.92	I	C	LP P
ORO	47.197	301.67	7.79	36.89	I	C	SP P
BER	47.216	321.98	7.79	36.88	I	C	LP P
CVF	47.269	297.41	7.79	36.87	I	C	SP P
DIX	47.492	302.39	7.78	36.78	I	C	LP P
ENN	47.629	308.88	7.76	36.72	I	C	SP P
EMS	47.821	302.47	7.74	36.60	I	C	LP P
BAG	48.234	100.83	7.71	36.40	I	C	LP P

Table 126. Station data or event 16 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
FRF	48.599	299.25	7.68	36.25	I	C	SP	P
KBS	48.652	347.25	7.67	36.23	I	C	LP	P
LRG	48.828	299.19	7.66	36.14	I	C	SP	P
LOR	49.624	304.64	7.61	35.85	I	C	SP	P
MAN	49.625	102.36	7.61	35.85	I	D	SP	P
KSI	49.674	136.43	7.60	35.83	I	D	SP	P
SSF	49.906	304.45	7.58	35.73	I	C	SP	P
GRC	50.138	304.83	7.56	35.63	I	C	SP	P
MZF	50.727	303.58	7.52	35.37	I	C	SP	P
KKM	51.308	114.90	7.47	35.12	I	C	SP	P
CAF	51.419	302.10	7.46	35.07	I	C	SP	P
LSF	51.426	303.86	7.46	35.07	I	C	SP	P
RJF	51.688	302.70	7.44	34.96	I	C	SP	P
LDF	51.911	307.12	7.42	34.86	I	C	SP	P
FLN	52.100	307.40	7.41	34.78	I	C	SP	P
LFF	52.318	302.45	7.39	34.68	I	C	SP	P
GRR	52.437	307.02	7.38	34.63	I	C	SP	P
MFF	52.448	304.69	7.38	34.63	I	C	SP	P
LGP	52.591	101.98	7.37	34.57	I	C	SP	P
MLS	52.670	299.98	7.36	34.54	I	C	SP	P
DDK	54.500	314.15	7.22	33.77	I	C	SP	P
DLE	54.644	314.08	7.21	33.70	I	C	SP	P
DMU	54.696	314.87	7.20	33.68	I	C	SP	P
DAG	54.788	343.62	7.19	33.64	I	C	SP	P
DAG	54.788	343.62	7.19	33.64	I	C	LP	P
DCN	55.053	314.29	7.17	33.53	I	C	SP	P
CGP	56.165	105.87	7.10	33.12	I	C	SP	P
TOL	57.351	298.08	7.01	32.66	I	C	SP	P
TOL	57.351	298.08	7.01	32.66	I	C	LP	P
BNG	57.494	249.26	7.00	32.61	I	C	SP	P
BCAO	57.504	249.26	7.00	32.60	E	C	LP	P
DAV	57.694	106.48	6.98	32.54	I	C	LP	P
CRT	58.079	294.99	6.96	32.41	I	C	SP	P
MAL	58.862	294.81	6.90	32.09	I	C	SP	P
PCR	59.091	196.62	6.88	31.99	E	C	LP	P
AVY	59.217	205.61	6.87	31.94	I	C	SP	P
MTE	59.609	299.87	6.84	31.78	I	C	SP	P
PTO	60.054	301.02	6.80	31.59	I	C	LP	P
PTO	60.054	301.02	6.80	148.41	E	R	LP	AP
MTH	61.395	298.90	6.70	31.04	I	C	SP	P
LIS	61.441	298.70	6.69	31.02	I	C	SP	P
MKS	61.489	121.71	6.69	31.00	I	C	SP	P
MTD	64.610	222.13	6.44	29.72	I	C	SP	P
KRI	65.732	223.80	6.34	29.24	I	C	SP	P
GDH	67.038	341.36	6.23	28.69	I	C	LP	P
BRW	67.412	14.94	6.20	28.54	I	C	SP	P
BUL	68.966	222.56	6.08	27.93	I	C	SP	P
GUMO	69.291	88.15	6.06	27.83	E	C	LP	P
GUA	69.355	88.17	6.06	27.81	E	C	LP	P
IMA	72.237	17.48	5.85	26.78	I	C	SP	P

Table 126. Station data for event 16 . . continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
SLR	73.698	219.45	5.75	26.30	I	C	LP P
TTA	74.144	20.30	5.72	26.12	I	C	SP P
BPI	74.187	219.39	5.71	26.11	I	C	SP P
KSR	74.521	220.44	5.70	26.02	I	C	SP P
COL	74.581	16.03	5.69	26.00	I	C	LP P
FBA	74.581	16.03	5.69	26.00	I	C	SP P
COL	74.581	16.03	5.69	26.00	I	C	SP P
MTN	74.984	118.70	5.66	25.84	I	C	SP P
KNA	75.358	122.49	5.64	25.72	I	C	SP P
BFS	75.418	219.90	5.63	25.70	I	C	SP P
SEK	76.152	218.43	5.59	25.49	I	C	SP P
BLF	77.518	219.03	5.51	25.09	I	C	SP P
MUN	80.218	142.13	5.27	23.94	E	C	LP P
KLB	80.687	140.82	5.23	23.75	I	D	SP P
GRM	80.756	216.30	5.22	23.70	I	C	SP P
RSNT	81.344	2.54	5.18	23.50	I	C	LP P
WBN	81.431	131.28	5.17	23.47	I	C	SP P
NWAO	81.493	141.98	5.17	23.46	I	C	LP P
NWAO	81.493	141.98	5.17	23.46	I	C	SP P
WB2	82.079	121.76	5.13	23.29	I	D	SP P
RKG	82.304	142.81	5.12	23.22	I	C	SP P
SUR	82.906	220.79	5.08	23.05	I	C	SP P
FCC	84.338	352.16	4.99	22.59	I	C	SP P
ISQ	86.212	119.04	4.84	21.89	I	C	SP P
EDM	90.652	2.51	4.69	21.15	I	C	SP P
RSON	92.030	350.26	4.66	21.02	I	C	LP P
RSON	92.030	350.26	4.66	21.02	I	D	SP P
RSNY	93.509	335.97	4.61	20.79	I	C	LP P
LON	96.430	8.71	4.53	20.42	E	C	LP P
RSSD	99.699	356.25	4.45	20.02	I	C	LP P
TUL	106.967	348.67	1.89	8.37	E	C	LP Pdf
TRN	115.109	306.50	1.88	8.33	E	C	LP PKP
BOG	127.614	313.64	1.86	8.23	E	C	LP PKP

Table 127. Station data for event 23.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
MHI	5.030	218.29	14.16	45.31	I	C	LP P
KH1	7.218	212.81	14.02	44.74	I	C	LP P
QUE	10.526	162.69	13.66	43.30	I	D	LP P
TAB	13.398	265.80	13.24	41.67	I	C	LP P
NDI	16.267	131.25	12.71	39.66	I	D	SP P
KVT	20.690	281.02	10.34	31.28	I	C	SP P
KKN	21.985	117.88	9.97	30.04	I	C	SP P
DMN	21.985	118.52	9.97	30.04	I	C	SP P
PKI	22.213	118.13	9.97	30.04	I	C	SP P
POO	23.521	154.33	9.69	29.11	I	C	SP P
JER	24.233	258.28	9.62	28.88	I	C	SP P
CFR	26.165	292.41	9.39	28.13	I	C	SP P
PSN	26.230	289.01	9.39	28.13	I	C	SP P
TLB	26.276	291.07	9.34	27.97	I	C	SP P
HYB	26.340	145.65	9.34	27.97	I	C	SP P
DST	26.527	279.82	9.34	27.97	I	C	SP P
BNT	26.901	281.71	9.29	27.80	I	C	SP P
EDC	26.945	281.71	9.29	27.80	I	D	SP P
ISR	27.304	292.41	9.24	27.64	I	C	SP P
CVO	27.536	293.92	9.24	27.64	I	C	SP P
BUC1	27.723	290.75	9.24	27.64	I	C	SP P
IZM	27.853	277.83	9.19	27.48	I	C	SP P
HLW	28.059	258.22	9.19	27.48	I	C	SP P
PVL	28.470	288.36	9.13	27.29	I	C	SP P
KDZ	28.571	285.21	9.13	27.29	I	C	SP P
MMB	29.776	285.56	8.92	26.61	I	C	SP P
VTS	29.985	287.69	8.92	26.61	I	C	SP P
ATH	30.655	278.59	8.87	26.45	I	C	SP P
VAY	30.682	285.38	8.87	26.45	I	C	SP P
TIM	31.000	294.18	8.83	26.32	I	C	SP P
WAR	31.148	306.81	8.83	26.32	E	C	LP P
NUR	31.204	323.33	8.83	26.32	I	C	LP P
JOS	31.314	299.56	8.79	26.19	I	C	SP P
SKO	31.382	286.94	8.79	26.19	I	C	SP P
SUF	31.501	327.77	8.79	26.19	I	C	SP P
KJF	31.630	330.91	8.79	26.19	I	C	LP P
KRA	31.706	302.55	8.79	26.19	I	C	SP P
LZH	31.906	84.42	8.76	26.09	I	C	LP P
BUD	32.374	297.72	8.72	25.97	I	C	SP P
KOD	32.473	153.44	8.72	25.97	I	C	SP P
SRO	32.832	298.39	8.69	25.87	I	C	SP P
TTG	32.880	288.38	8.69	25.87	I	C	SP P
ZST	33.618	299.19	8.66	25.77	I	C	SP P
ARO	33.912	217.97	8.62	25.65	E	C	LP P
KSP	34.040	303.98	8.62	25.65	I	C	SP P
VIE	34.108	299.35	8.62	25.65	I	C	LP P
VKA	34.136	299.38	8.62	25.65	I	C	SP P
LCI	34.318	285.11	8.59	25.55	I	C	SP P
UPP	34.333	320.15	8.59	25.55	I	C	SP P
BRT	34.731	286.29	8.59	25.55	I	C	SP P

Table 127. Station data for event 23 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
KEV	35.059	338.95	8.56	25.45	I	C	LP P
PRU	35.188	302.54	8.56	25.45	I	C	SP P
ORI	35.505	285.17	8.53	25.36	I	C	SP P
BRG	35.526	304.10	8.53	25.36	I	C	LP P
LJU	35.600	295.76	8.53	25.36	I	C	SP P
KMR	35.613	299.25	8.53	25.36	I	C	LP P
CEY	35.720	295.26	8.53	25.36	I	C	SP P
KHC	35.875	301.15	8.50	25.26	I	C	SP P
BRN	35.948	306.77	8.50	25.26	I	C	SP P
CLL	36.102	304.89	8.50	25.26	I	C	SP P
KMI	36.121	102.61	8.50	25.26	I	C	LP P
SGO	36.205	286.41	8.50	25.26	I	C	SP P
KBA	36.262	297.71	8.48	25.20	I	C	SP P
COP	36.471	312.30	8.48	25.20	I	C	LP P
COP	36.471	312.30	8.48	25.20	I	C	SP P
BHG	36.490	298.86	8.48	25.20	I	C	SP P
DUI	36.538	288.49	8.48	25.20	I	C	SP P
SGG	36.665	288.07	8.48	25.20	I	C	SP P
OVO	36.799	287.16	8.45	25.10	I	C	SP P
HOF	36.876	303.29	8.45	25.10	I	C	SP P
ALP	36.902	290.57	8.45	25.10	I	C	SP P
MOX	37.017	303.86	8.45	25.10	I	C	LP P
AQU	37.128	289.93	8.45	25.10	I	C	SP P
CHTO	37.295	114.51	8.42	25.01	I	N	LP P
GRF	37.354	302.33	8.42	25.01	I	C	SP P
GRFO	37.358	302.33	8.42	25.01	E	C	LP P
POI	37.405	290.42	8.42	25.01	I	C	SP P
FUR	37.499	299.82	8.42	25.01	I	C	SP P
CTI	37.580	296.32	8.42	25.01	I	C	SP P
MNS	37.639	290.20	8.42	25.01	I	C	SP P
RMP	37.769	289.29	8.39	24.91	I	C	SP P
RDP	37.773	289.20	8.39	24.91	I	C	SP P
OGA	37.864	297.77	8.39	24.91	I	C	SP P
HAM	37.908	308.59	8.39	24.91	I	C	SP P
GIB	37.937	282.85	8.39	24.91	I	C	SP P
SAL	38.435	295.86	8.36	24.82	I	C	SP P
OSS	38.492	297.65	8.36	24.82	E	C	LP P
STU	38.786	301.11	8.33	24.72	I	C	LP P
SAX	38.930	298.69	8.33	24.72	E	C	LP P
VDL	38.986	297.47	8.33	24.72	E	C	LP P
TNS	39.074	303.51	8.33	24.72	I	C	SP P
SLE	39.409	299.65	8.30	24.63	E	C	LP P
BUH	39.433	301.11	8.30	24.63	I	C	LP P
TMA	39.466	297.01	8.30	24.63	E	C	LP P
ZUL	39.528	299.23	8.30	24.63	E	C	LP P
GWF	39.782	301.68	8.27	24.53	I	C	SP P
BNS	39.790	304.82	8.27	24.53	I	C	SP P
BJI	39.856	72.67	8.27	24.53	E	C	LP P
KHT	39.871	119.46	8.27	24.53	I	C	SP P
WIT	39.907	307.75	8.27	24.53	I	C	SP P

Table 127. Station data for event 23 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec./°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
WTS	39.900	306.46	8.27	24.53	I	C	SP P
MMK	40.096	297.13	8.27	24.53	E	C	LP P
CDF	40.101	300.87	8.27	24.53	I	C	SP P
ECH	40.213	300.59	8.27	24.53	I	C	SP P
CVF	40.313	291.65	8.24	24.44	I	C	SP P
BAF	40.390	300.04	8.24	24.44	I	C	SP P
DIX	40.466	297.30	8.24	24.44	E	C	LP P
BER	40.495	319.54	8.24	24.44	I	C	LP P
BSF	40.525	300.08	8.24	24.44	I	C	SP P
HAU	40.785	300.43	8.22	24.38	I	C	SP P
EMS	40.795	297.40	8.22	24.38	E	C	LP P
DBN	40.890	306.80	8.22	24.38	I	C	LP P
DOU	41.546	303.87	8.19	24.28	E	C	LP P
FRF	41.611	293.78	8.19	24.28	I	C	SP P
LMR	41.769	293.50	8.16	24.19	I	C	SP P
LRG	41.840	293.72	8.16	24.19	I	C	SP P
CDR	42.194	294.21	8.16	24.19	I	C	SP P
LBF	42.573	299.44	8.13	24.09	I	C	SP P
LOR	42.586	299.87	8.13	24.09	I	C	SP P
SMF	42.744	298.98	8.13	24.09	I	C	SP P
SSF	42.868	299.66	8.11	24.03	I	C	SP P
AVF	43.035	299.31	8.11	24.03	I	C	SP P
GRC	43.100	300.09	8.11	24.03	I	C	SP P
VDM	43.250	302.81	8.08	23.93	E	C	LP P
MZF	43.693	298.69	8.08	23.93	I	C	SP P
TCF	43.925	298.89	8.05	23.84	I	C	SP P
LSF	44.391	299.02	8.02	23.75	I	C	SP P
CAF	44.395	297.05	8.02	23.75	I	C	SP P
RJF	44.660	297.72	8.02	23.75	I	C	SP P
LDF	44.874	302.65	8.00	23.68	I	C	SP P
LPO	45.064	296.98	8.00	23.68	I	C	SP P
FLN	45.064	302.97	8.00	23.68	I	C	SP P
LFF	45.292	297.45	7.97	23.59	I	C	SP P
GRR	45.400	302.54	7.97	23.59	I	C	SP P
MFF	45.410	299.94	7.97	23.59	I	C	SP P
LPF	45.610	302.10	7.97	23.59	I	C	SP P
EPF	46.161	295.05	7.94	23.50	I	C	SP P
DDK	47.544	310.41	7.85	23.21	I	C	SP P
DLE	47.687	310.31	7.85	23.21	I	C	SP P
DMU	47.755	311.19	7.82	23.12	I	C	SP P
LGR	48.325	295.29	7.79	23.03	I	C	SP P
ALI	48.448	289.44	7.79	23.03	I	D	LP P
DAG	49.362	342.50	7.70	22.74	I	C	SP P
DAG	49.362	342.50	7.70	22.74	E	C	LP P
ANP	50.349	88.84	7.62	22.49	E	C	LP P
TOL	50.380	292.73	7.62	22.49	I	C	LP P
CRT	51.174	289.39	7.58	22.37	I	C	SP P
PTO	53.040	296.00	7.42	21.87	I	C	SP P
SFS	53.373	289.73	7.38	21.75	I	C	SP P
BNG	53.813	240.52	7.34	21.63	I	C	SP P

Table 127. Station data for event 23 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec./°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
IFR	53.948	285.99	7.34	21.63	I	C	SP P
SHK	54.092	72.50	7.34	21.63	I	C	SP P
LIS	54.459	293.51	7.30	21.50	I	C	SP P
BAG	54.679	98.47	7.30	21.50	I	C	LP P
MAT	57.122	67.77	7.11	20.92	I	C	SP P
AVY	60.696	196.99	6.85	20.12	I	C	SP P
GDH	61.387	338.77	6.76	19.84	I	C	LP P
PCR	61.615	188.25	6.76	19.84	E	C	LP P
LEM	62.119	128.36	6.72	19.72	I	C	LP P
TET	62.627	212.51	6.68	19.60	I	C	SP P
MBC	63.712	0.72	6.60	19.35	I	C	SP P
MTD	64.030	214.12	6.56	19.23	I	C	SP P
DAV	64.366	103.10	6.52	19.11	I	C	LP P
KRI	64.938	215.96	6.48	18.99	I	C	SP P
BRW	65.080	13.24	6.48	18.99	I	C	SP P
BUL	68.295	215.19	6.19	18.11	I	C	SP P
BUL	68.295	215.19	6.19	18.11	I	C	LP P
KIC	69.238	260.47	6.15	17.99	I	C	SP P
INK	70.965	6.55	6.00	17.53	I	C	SP P
COL	72.321	13.39	5.89	17.20	I	C	LP P
FBA	72.321	13.39	5.89	17.20	I	C	SP P
SLR	73.368	212.74	5.82	16.99	I	C	LP P
EVA	73.727	211.72	5.82	16.99	I	C	SP P
BPI	73.861	212.74	5.78	16.87	I	C	SP P
KSR	74.064	213.83	5.78	16.87	I	C	SP P
GUMO	74.923	84.89	5.72	16.69	I	C	LP P
GUA	74.989	84.90	5.72	16.69	I	C	LP P
BFS	75.018	213.42	5.72	16.69	I	C	SP P
PME	75.068	15.35	5.72	16.69	I	C	SP P
SEK	75.927	212.05	5.65	16.48	I	C	SP P
SCH	76.101	332.88	5.65	16.48	I	C	SP P
YKC	77.544	358.96	5.55	16.18	I	C	SP P
RSNT	77.544	359.02	5.55	16.18	I	C	SP P
NAU	79.156	131.99	5.45	15.88	I	C	SP P
FCC	79.516	348.26	5.42	15.79	I	C	SP P
GRM	80.756	210.53	5.26	15.31	I	C	SP P
SUR	82.339	215.26	5.15	14.99	I	C	SP P
MNT	86.275	331.25	4.87	14.15	I	C	SP P
GAC	86.772	332.48	4.83	14.04	I	C	LP P
MUN	86.975	137.28	4.83	14.04	I	C	LP P
RSON	87.011	345.67	4.83	14.04	I	C	SP P
NWAO	88.254	137.18	4.75	13.80	I	C	LP P
WB2	89.102	117.17	4.73	13.74	I	C	SP P
SES	89.539	356.41	4.71	13.68	I	C	SP P
RXF	91.196	358.99	4.70	13.65	I	C	SP P
PMG	91.330	101.12	4.69	13.62	E	C	LP P
ASPA	91.361	120.14	4.69	13.62	I	C	SP P
LDM	91.610	359.11	4.69	13.62	I	C	SP P
NEW	91.807	0.31	4.67	13.56	I	C	SP P
CLX	91.853	358.98	4.67	13.56	I	C	SP P

Table 127. Station data for event 23 ... continued.

Station	Distance (°)	Azimuth (°)	$dt/d\Delta$ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SCP	91.901	331.58	4.67	13.56	I	C	LP	P
LON	93.200	3.55	4.65	13.50	I	C	LP	P
LRM	94.168	357.06	4.61	13.38	I	C	SP	P
RSSD	95.187	350.91	4.58	13.29	I	C	SP	P
COR	95.275	4.77	4.56	13.24	E	C	LP	P
BLA	95.995	331.68	4.55	13.21	E	C	LP	P
BDW	97.048	354.75	4.53	13.15	I	C	SP	P
CTAO	97.541	109.80	4.52	13.12	I	C	LP	P
CTA	97.541	109.80	4.52	13.12	I	D	SP	P
TUL	101.760	342.83	4.45	12.91	E	C	LP	Pdf
SHA	104.569	334.86	4.45	12.91	I	C	LP	Pdf
SJG	105.277	310.47	1.89	5.45	I	C	LP	PKP
EPT	107.667	350.94	1.89	5.45	E	C	LP	PKP
TRN	108.070	301.84	1.89	5.45	I	C	LP	PKP
RJV	109.435	118.10	1.89	5.45	E	C	LP	PKP
NOU	113.810	99.65	1.88	5.43	I	C	SP	PKP
LPA	133.902	257.13	1.83	5.27	E	C	LP	PKP
PEL	142.806	266.19	1.72	4.96	I	C	SP	PKP

Table 128. Station data for event 51.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
QUE	7.085	208.97	13.01	90.70	I	D	SP	P
POO	18.055	170.95	10.45	53.45	I	D	SP	P
HYB	20.149	158.36	9.98	50.09	I	D	SP	P
LZH	26.490	80.92	9.19	44.91	I	D	SP	P
KM1	29.465	103.57	8.84	42.79	I	D	LP	P
CHG	30.273	117.96	8.78	42.45	E	D	LP	P
CFR	33.177	298.67	8.59	41.30	I	C	SP	P
PSN	33.184	295.93	8.59	41.30	I	C	SP	P
NST	33.226	120.86	8.58	41.28	I	D	SP	P
TLB	33.267	297.59	8.58	41.27	I	C	SP	P
CLI	33.801	301.13	8.55	41.08	I	C	SP	P
JMB	34.433	293.88	8.51	40.85	I	D	SP	P
MLR	34.732	299.25	8.50	40.77	I	C	SP	P
CGN	34.739	296.92	8.50	40.77	I	C	SP	P
PVL	35.409	295.22	8.46	40.58	I	C	SP	P
KDZ	35.433	292.62	8.46	40.57	I	C	SP	P
MSR	35.507	300.22	8.46	40.54	I	C	SP	P
PLD	35.858	293.51	8.44	40.42	I	C	SP	P
MMB	36.646	292.80	8.39	40.15	I	C	SP	P
DEV	36.849	300.04	8.38	40.08	I	C	SP	P
VTS	36.907	294.55	8.37	40.06	I	C	SP	P
NUR	37.809	324.33	8.32	39.75	I	C	SP	P
JOS	38.382	304.40	8.28	39.54	I	C	SP	P
KRA	38.771	306.90	8.27	39.45	I	C	SP	P
PSZ	38.828	303.49	8.27	39.44	I	C	SP	P
BUD	39.436	302.84	8.23	39.25	I	C	SP	P
SNG	39.811	129.82	8.21	39.12	E	D	LP	P
KEV	40.803	338.32	8.16	38.82	E	C	LP	P
KSP	41.098	308.15	8.14	38.74	I	C	SP	P
VKA	41.203	304.23	8.14	38.71	I	C	SP	P
SSE	41.755	82.25	8.10	38.51	I	D	SP	P
IPM	42.098	131.74	8.08	38.41	I	D	SP	P
PRU	42.253	306.93	8.08	38.38	I	C	SP	P
BRG	42.583	308.28	8.06	38.30	I	C	SP	P
KMR	42.680	304.11	8.06	38.27	I	C	LP	P
KHC	42.943	305.74	8.04	38.17	I	D	SP	P
BRN	42.981	310.58	8.04	38.16	I	C	SP	P
CLL	43.153	308.97	8.03	38.10	I	C	SP	P
KBA	43.323	302.78	8.02	38.04	I	C	SP	P
WET	43.398	305.82	8.01	38.01	I	C	SP	P
BHG	43.550	303.76	8.01	37.97	I	C	SP	P
HOF	43.938	307.60	7.99	37.89	I	C	SP	P
MOX	44.075	308.09	7.98	37.85	I	C	LP	P
GRF	44.420	306.77	7.96	37.73	I	C	SP	P
GRFO	44.424	306.77	7.96	37.73	E	C	LP	P
SCE	44.435	302.94	7.96	37.73	I	C	SP	P
FUR	44.567	304.60	7.95	37.68	I	C	SP	P
GAP	44.806	303.65	7.94	37.60	I	C	SP	P
OGA	44.925	302.81	7.93	37.56	I	C	SP	P
KONO	45.064	321.00	7.92	37.52	I	C	LP	P

Table 128. Station data for event 51 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
MUD	45.242	316.48	7.91	37.46	I	C	SP P
KGM	45.510	131.33	7.90	37.37	I	D	SP P
OSS	45.553	302.70	7.90	37.36	I	C	LP P
STU	45.854	305.72	7.88	37.26	I	C	LP P
SAX	45.996	303.60	7.87	37.21	I	C	LP P
VDL	46.045	302.53	7.87	37.19	I	C	LP P
TNS	46.135	307.81	7.86	37.16	I	C	SP P
LLS	46.297	303.14	7.85	37.11	I	D	LP P
SLE	46.477	304.44	7.84	37.05	I	D	LP P
BUH	46.502	305.72	7.84	37.04	I	C	SP P
TMA	46.523	302.12	7.84	37.03	I	C	LP P
ZUL	46.595	304.07	7.83	37.01	I	C	LP P
GWF	46.849	306.22	7.82	36.93	I	C	SP P
WTS	46.935	310.42	7.81	36.90	I	C	SP P
MMK	47.154	302.22	7.80	36.82	I	C	LP P
CDF	47.170	305.51	7.80	36.82	I	C	SP P
CVF	47.308	297.40	7.79	36.78	I	C	SP P
DIX	47.525	302.37	7.78	36.69	I	C	LP P
BSF	47.594	304.81	7.77	36.66	I	C	SP P
ENN	47.654	308.86	7.76	36.63	I	C	SP P
WLF	47.685	307.36	7.76	36.62	E	C	LP P
HAU	47.854	305.12	7.74	36.51	I	C	SP P
EMS	47.854	302.45	7.74	36.51	I	C	LP P
DBN	47.921	310.74	7.73	36.47	I	C	LP P
DOU	48.604	308.16	7.68	36.17	E	C	LP P
UCC	48.629	309.12	7.68	36.16	E	C	LP P
FRF	48.636	299.24	7.68	36.16	I	C	SP P
LMR	48.791	298.99	7.66	36.08	I	C	SP P
LRG	48.865	299.18	7.66	36.05	I	C	SP P
LBF	49.641	304.24	7.61	35.78	I	C	SP P
LOR	49.654	304.63	7.61	35.77	I	C	SP P
KSI	49.658	136.55	7.61	35.77	I	D	SP P
SMF	49.810	303.83	7.59	35.70	I	C	SP P
SSF	49.936	304.43	7.58	35.64	I	C	SP P
AVF	50.102	304.12	7.57	35.57	I	C	SP P
MZF	50.759	303.57	7.52	35.29	I	C	SP P
TCF	50.991	303.74	7.50	35.19	I	C	SP P
CAF	51.452	302.10	7.46	34.99	I	C	SP P
LSF	51.457	303.86	7.46	34.99	I	C	SP P
RJF	51.721	302.70	7.44	34.87	I	C	SP P
LDF	51.939	307.11	7.42	34.78	I	C	SP P
FLN	52.127	307.39	7.41	34.70	I	C	SP P
LFF	52.351	302.45	7.39	34.60	I	C	SP P
GRR	52.465	307.02	7.38	34.55	I	C	SP P
MFF	52.478	304.68	7.38	34.55	I	C	SP P
LPF	52.677	306.62	7.36	34.46	I	C	SP P
EPF	53.201	300.27	7.32	34.25	I	C	SP P
DDK	54.518	314.15	7.22	33.69	I	C	SP P
DLE	54.663	314.07	7.21	33.62	I	C	SP P
DMU	54.713	314.87	7.20	33.60	I	C	SP P

Table 128. Station data for event 51 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
DAG	54.768	343.62	7.20	33.57	I	C	SP P
DCN	55.072	314.28	7.17	33.46	I	C	SP P
AKU	57.017	330.42	7.04	32.74	I	C	SP P
TOL	57.390	298.09	7.01	32.58	E	C	LP P
TOL	57.390	298.09	7.01	32.58	I	C	SP P
ALM	57.422	294.20	7.00	32.57	I	C	SP P
BNG	57.568	249.29	6.99	32.51	I	C	SP P
REY	59.039	329.28	6.89	31.95	I	C	SP P
ALE	59.065	353.60	6.88	31.94	I	C	SP P
PTO	60.088	301.03	6.80	31.51	I	C	LP P
LIS	61.479	298.71	6.69	30.94	I	C	SP P
GDH	67.021	341.38	6.24	28.64	I	C	LP P
GDH	67.021	341.38	6.24	28.64	I	C	SP P
BRW	67.357	14.97	6.21	28.50	I	C	SP P
BUL	69.039	222.62	6.08	27.84	I	C	SP P
NAU	72.232	137.03	5.85	26.72	I	D	SP P
MBL	73.618	132.82	5.76	26.28	I	D	SP P
SLR	73.770	219.51	5.75	26.20	I	C	SP P
EVA	74.000	218.44	5.73	26.12	I	C	SP P
TTA	74.084	20.34	5.72	26.09	I	C	SP P
BPI	74.259	219.44	5.71	26.05	I	C	SP P
COL	74.525	16.07	5.70	25.96	I	C	SP P
FBA	74.525	16.07	5.70	25.96	I	C	SP P
KSR	74.593	220.49	5.69	25.94	I	C	SP P
KIC	74.709	266.61	5.68	25.90	I	C	SP P
SEK	76.223	218.49	5.58	25.42	I	C	SP P
PMR	77.027	18.41	5.54	25.18	I	C	SP P
MEK	77.135	137.27	5.53	25.15	I	D	SP P
BLF	77.589	219.09	5.50	25.02	I	C	SP P
MRWA	77.867	140.71	5.48	24.90	I	D	SP P
KDC	79.318	22.02	5.36	24.32	I	C	SP P
BAL	79.350	141.03	5.36	24.30	I	D	SP P
PNL	80.992	15.03	5.20	23.55	I	C	SP P
YKC	81.307	2.53	5.18	23.46	I	C	SP P
RSNT	81.301	2.58	5.18	23.46	I	C	SP P
WB2	82.045	121.82	5.14	23.25	I	D	SP P
SCH	82.098	336.83	5.13	23.23	I	C	SP P
ASPA	84.293	124.81	4.99	22.56	I	D	SP P
ISQ	86.175	119.09	4.85	21.86	I	D	SP P
FFC	88.973	355.88	4.71	21.22	I	C	SP P
CTA	90.594	114.58	4.69	21.11	I	D	SP P
EDM	90.610	2.56	4.69	21.11	I	C	SP P
SES	93.499	1.25	4.61	20.75	I	C	SP P
BLA	102.028	336.94	4.44	19.95	I	C	LP Pdf
SNA	118.549	201.68	1.88	8.29	I	C	SP PKP
SPA	126.282	180.00	1.86	8.23	I	C	SP PKP
ANT	144.427	280.02	1.69	7.47	I	C	SP PKP
FCH	148.162	264.05	1.61	7.09	I	C	SP PKP
PEL	148.425	264.57	1.60	7.06	I	C	SP PKP
ROCH	148.637	265.04	1.59	7.03	I	C	SP PKP

Table 128. Station data for event 51 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
LNV	149.234	263.40	1.58	6.96	I	C	SP PKP
TMU	151.116	254.37	1.52	6.71	I	C	SP PKP

Table 129. Station data for event 103.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
CHG	8.030	167.29	13.93	54.75	I	C	SP P
NST	11.330	164.89	13.53	52.48	I	C	SP P
SNG	19.699	169.55	10.62	38.50	I	C	SP P
SSE	21.539	72.59	10.07	36.18	I	C	LP P
ANP	22.018	88.48	9.97	35.76	E	C	LP P
POO	22.910	254.06	9.78	34.98	I	C	SP P
BAG	24.090	110.38	9.62	34.33	I	C	LP P
MAT	36.137	63.92	8.50	29.89	I	C	SP P
MAJO	36.137	63.92	8.50	29.89	E	C	LP P
GUMO	46.462	96.58	7.91	27.63	E	N	LP P
NAU	52.087	158.27	7.50	26.08	I	C	SP P
ANTO	54.271	301.32	7.30	25.34	E	D	LP P
KEV	58.334	337.38	7.00	24.23	E	D	LP P
WB2	58.780	138.23	6.96	24.08	I	C	SP P
PVL	59.488	306.13	6.92	23.93	I	D	SP P
KDZ	59.608	304.39	6.92	23.93	I	D	SP P
VTS	61.010	305.80	6.80	23.49	I	D	SP P
ASPA	61.420	141.27	6.76	23.35	I	C	SP P
NWAO	62.308	160.90	6.68	23.05	I	C	LP P
NWAO	62.308	160.90	6.68	23.05	I	C	SP P
CTA	66.593	129.20	6.35	21.85	I	C	LP P
CTAO	66.593	129.20	6.35	21.85	I	C	LP P
GRFO	67.568	315.51	6.27	21.56	E	D	LP P
DAG	69.824	347.24	6.07	20.84	I	D	SP P
ADE	72.878	145.19	5.85	20.06	I	C	SP P
MBC	74.839	8.47	5.72	19.59	I	C	SP P
COL	75.991	23.46	5.65	19.34	I	C	SP P
BNG	77.786	268.84	5.52	18.88	I	C	SP P
INK	78.251	17.07	5.49	18.77	I	C	SP P
TOL	81.235	310.18	5.26	17.96	E	D	LP P

Table 130. Station data for event 174.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
NDI	9.192	142.73	13.52	78.68	I	D	SP	P
MHI	9.213	274.04	13.51	78.63	I	D	SP	P
DMN	14.781	121.37	12.75	67.69	I	D	SP	P
KKN	14.790	120.44	12.75	67.67	I	D	SP	P
PKI	15.015	120.83	12.71	67.25	I	D	SP	P
POO	17.780	170.79	12.36	63.75	I	D	SP	P
LZH	26.544	80.37	9.28	42.30	I	C	LP	P
KMI	29.408	103.08	8.92	40.33	E	C	LP	P
JER	29.823	271.99	8.88	40.09	I	C	SP	P
ANTO	30.088	288.67	8.85	39.96	E	C	LP	P
CHG	30.150	117.53	8.85	39.93	I	C	LP	P
CHTO	30.150	117.53	8.85	39.93	I	C	LP	P
CHG	30.150	117.53	8.85	39.93	I	C	SP	P
GPA	31.944	289.84	8.72	39.27	I	C	SP	P
DST	33.309	288.86	8.63	38.77	I	C	SP	P
PSN	33.301	296.31	8.63	38.78	I	C	SP	P
HLW	33.591	270.72	8.61	38.68	I	C	SP	P
VRI	34.314	300.26	8.57	38.45	I	D	SP	P
ISR	34.443	298.97	8.56	38.41	I	D	SP	P
PCT	34.664	120.23	8.55	38.34	I	C	SP	P
BUC1	34.830	297.59	8.54	38.29	I	C	SP	P
MLR	34.863	299.60	8.54	38.28	I	C	SP	P
CMP	35.505	299.23	8.50	38.07	I	C	SP	P
PVL	35.522	295.58	8.50	38.07	I	D	SP	P
KDZ	35.534	292.98	8.50	38.07	I	C	SP	P
BJI	35.543	69.79	8.50	38.06	I	C	LP	P
PLD	35.963	293.86	8.47	37.93	I	C	SP	P
COZ	35.994	299.35	8.47	37.92	I	C	SP	P
OUR	36.736	291.02	8.43	37.73	I	C	SP	P
MMB	36.748	293.14	8.43	37.72	I	C	SP	P
SRS	36.913	292.39	8.42	37.64	I	C	SP	P
VTS	37.017	294.89	8.41	37.60	I	C	SP	P
PAIG	37.030	290.42	8.41	37.59	I	C	SP	P
GZR	37.094	299.55	8.40	37.57	I	C	SP	P
ATH	37.371	287.24	8.39	37.49	I	C	SP	P
KNT	37.425	292.58	8.38	37.47	I	C	SP	P
THE	37.456	291.71	8.38	37.46	I	C	SP	P
VAY	37.647	292.90	8.37	37.40	I	C	SP	P
LIT	37.901	290.95	8.36	37.32	I	C	SP	P
NUR	38.033	324.54	8.35	37.28	I	C	LP	P
SKO	38.392	294.14	8.33	37.16	I	C	SP	P
JOS	38.534	304.69	8.32	37.12	I	C	SP	P
SPC	38.726	305.80	8.31	37.08	I	C	SP	P
BUD	39.582	303.13	8.27	36.85	I	C	SP	P
KEV	41.061	338.44	8.19	36.44	I	C	LP	P
SOP	41.235	303.60	8.18	36.39	I	C	SP	P
UPP	41.267	322.17	8.17	36.37	I	C	SP	P
VIE	41.327	304.47	8.17	36.36	I	C	LP	P
VKA	41.355	304.49	8.17	36.35	I	C	SP	P
SSE	41.802	81.93	8.14	36.20	E	C	LP	P

Table 130. Station data for event 174 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
PRU	42.415	307.18	8.11	36.06	I	C	SP P
KMR	42.831	304.36	8.09	35.94	I	C	LP P
CEY	42.900	300.94	8.09	35.92	I	C	SP P
KHC	43.101	305.98	8.07	35.86	I	C	SP P
BRN	43.158	310.81	8.07	35.84	I	C	SP P
CLL	43.324	309.20	8.06	35.79	I	C	SP P
TRI	43.364	300.99	8.06	35.78	I	C	SP P
KBA	43.469	303.03	8.05	35.75	I	C	SP P
COP	43.606	315.58	8.04	35.70	I	C	SP P
HOF	44.103	307.83	8.02	35.56	I	C	SP P
MOX	44.242	308.32	8.01	35.53	I	C	LP P
SEO	44.302	70.74	8.01	35.53	I	C	LP P
ANP	44.457	89.64	8.00	35.49	I	C	LP P
TATO	44.528	89.92	8.00	35.47	I	C	LP P
GRFO	44.586	307.00	8.00	35.46	E	C	LP P
GRF	44.581	306.99	8.00	35.46	I	C	SP P
OGA	45.071	303.04	7.97	35.31	I	C	SP P
KONO	45.277	321.17	7.95	35.24	I	C	LP P
STU	46.012	305.93	7.91	35.02	I	C	LP P
TNS	46.301	308.02	7.89	34.93	I	C	SP P
KOE	46.731	308.38	7.87	34.80	I	C	SP P
BNS	47.011	309.17	7.85	34.72	I	C	SP P
BGG	47.011	308.13	7.85	34.72	I	C	SP P
STB	47.272	308.71	7.83	34.64	I	C	SP P
KLL	47.598	308.85	7.81	34.54	I	C	SP P
DBN	48.099	310.93	7.78	34.38	E	C	LP P
FKK	48.201	74.75	7.78	34.34	I	C	SP P
DOU	48.771	308.35	7.73	34.11	E	C	LP P
NAI	48.942	228.00	7.72	34.04	I	C	LP P
MAN	49.518	102.21	7.67	33.81	I	C	SP P
SHK	49.649	72.67	7.66	33.75	I	C	SP P
ESY	52.043	316.79	7.47	32.80	I	C	SP P
EDU	52.150	317.62	7.46	32.76	I	C	SP P
EAB	52.943	317.35	7.40	32.45	I	C	SP P
MAJO	53.149	68.22	7.38	32.37	I	C	LP P
MAT	53.149	68.22	7.38	32.37	I	C	SP P
BKB	56.712	120.61	7.10	31.03	I	C	SP P
AKU	57.257	330.51	7.06	30.80	I	C	SP P
TOL	57.515	298.24	7.04	30.71	I	C	LP P
MZM	58.755	223.49	6.95	30.28	I	C	SP P
PTO	60.226	301.17	6.83	29.71	I	C	LP P
SFS	60.438	295.38	6.82	29.63	I	C	SP P
LIS	61.607	298.84	6.72	29.19	I	C	SP P
CLK	61.755	219.90	6.71	29.13	I	C	SP P
MTD	64.470	222.27	6.49	28.10	I	C	SP P
KRI	65.598	223.94	6.40	27.68	I	C	SP P
GDH	67.284	341.41	6.26	27.00	I	C	SP P
GDH	67.284	341.41	6.26	27.00	I	C	LP P
MBC	67.657	2.64	6.23	26.86	I	C	SP P
BUL	68.827	222.68	6.13	26.43	I	C	LP P

Table 130. Station data for event 174 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
GUMO	69.242	88.10	6.10	26.27	I	C	LP P
GUA	69.306	88.12	6.09	26.24	E	C	LP P
JOZ	73.097	215.61	5.82	24.99	I	C	SP P
SLR	73.549	219.55	5.80	24.87	I	C	LP P
EVA	73.776	218.48	5.78	24.78	I	C	SP P
BPI	74.037	219.48	5.76	24.69	I	C	SP P
KSR	74.375	220.53	5.74	24.60	I	C	SP P
COL	74.796	16.04	5.71	24.45	I	C	SP P
COL	74.796	16.04	5.71	24.45	I	C	LP P
BFS	75.270	220.00	5.67	24.31	I	C	SP P
SWZ	76.264	220.91	5.61	24.04	I	C	SP P
WIN	77.440	229.83	5.53	23.67	I	C	SP P
BAL	79.137	140.98	5.42	23.15	I	C	SP P
MUN	79.993	142.15	5.33	22.75	I	C	LP P
MUN	79.993	142.15	5.33	22.75	I	C	SP P
NWAO	81.268	142.01	5.22	22.25	I	C	LP P
WRA	81.896	121.79	5.17	22.02	I	C	SP P
SUR	82.761	220.86	5.11	21.78	I	C	SP P
ASPA	84.140	124.78	5.03	21.41	I	C	SP P
CER	84.326	221.24	5.02	21.37	I	C	SP P
TUH	84.353	221.37	5.02	21.36	I	C	SP P
PMG	84.596	105.69	5.00	21.28	E	C	LP P
FFC	89.252	355.87	4.71	20.00	I	C	SP P
CTAO	90.485	114.57	4.70	19.94	I	C	LP P
CTA	90.485	114.57	4.70	19.94	I	C	SP P
GAC	93.028	337.13	4.64	19.67	I	C	LP P
PNT	94.367	6.88	4.60	19.47	I	C	SP P
WES	94.531	332.91	4.59	19.45	I	C	LP P
HNR	94.730	98.15	4.58	19.41	I	C	LP P
YKM	95.128	4.38	4.56	19.34	I	C	SP P
NEW	95.627	5.37	4.55	19.26	I	C	SP P
LHD	95.740	4.33	4.54	19.25	I	C	SP P
LON	96.659	8.76	4.53	19.17	I	C	LP P
SCP	98.202	336.56	4.50	19.04	I	C	LP P
COR	98.586	10.21	4.49	19.00	I	C	SP P
CAN	101.647	125.21	4.45	18.84	I	C	SP Pds
TUL	107.214	348.71	1.89	7.88	E	C	LP PKP
SHA	110.626	340.78	1.89	7.88	I	C	LP PKP
SJG	112.430	315.48	1.89	7.88	I	C	LP PKP
ANT	144.467	279.63	1.69	7.06	E	C	LP PKP
PEL	148.390	264.11	1.60	6.68	I	C	SP PKP

Table 131. Station data for event 175.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
KSH	5.261	49.94	13.63	90.00	I	D	SP P
MHI	9.120	274.11	13.42	80.15	I	C	SP P
NDI	9.236	142.14	13.41	79.88	I	D	SP P
KHI	10.143	262.02	13.32	77.86	I	C	LP P
DMN	14.853	121.06	12.66	68.36	I	D	SP P
KKN	14.863	120.14	12.66	68.34	I	D	SP P
WMQ	15.031	54.31	12.63	68.02	I	D	SP P
PKI	15.087	120.53	12.62	67.91	I	D	SP P
BOM	17.304	173.51	12.20	63.60	I	D	SP P
LSA	18.262	104.88	11.18	55.15	I	D	SP P
HYB	19.912	157.72	10.23	48.64	I	D	SP P
GTA	23.129	73.19	9.62	44.91	I	D	SP P
KOD	26.525	165.13	9.26	42.83	I	D	SP P
LZH	26.639	80.30	9.25	42.76	I	C	LP P
LZH	26.639	80.30	9.25	42.76	I	C	SP P
KMI	29.496	102.95	8.88	40.70	E	D	LP P
JER	29.730	271.95	8.86	40.58	I	C	SP P
ANTO	30.004	288.68	8.84	40.47	I	C	LP P
CHTO	30.225	117.36	8.83	40.39	I	D	LP P
CHG	30.225	117.36	8.83	40.39	I	D	SP P
BTO	30.897	69.73	8.78	40.13	I	C	SP P
BDT	31.304	119.57	8.76	39.99	I	D	SP P
HHC	32.046	69.06	8.70	39.69	I	C	SP P
HRT	32.297	290.93	8.68	39.60	I	C	SP P
TIY	33.135	74.66	8.63	39.33	I	C	SP P
NST	33.163	120.32	8.63	39.32	I	D	SP P
PSN	33.224	296.33	8.63	39.30	I	C	SP P
CFR	33.231	299.07	8.63	39.29	I	C	SP P
BNT	33.670	290.34	8.60	39.15	I	C	SP P
EDC	33.714	290.33	8.60	39.14	I	C	SP P
CLI	33.868	301.52	8.59	39.09	I	C	SP P
CVO	34.626	300.20	8.54	38.84	I	C	SP P
BUC1	34.755	297.61	8.54	38.80	I	C	SP P
TDD	34.938	233.07	8.53	38.74	E	C	LP P
NNT	35.069	124.66	8.52	38.70	I	D	SP P
PRK	35.083	288.71	8.52	38.69	I	C	SP P
ARO	35.183	232.83	8.51	38.66	I	C	LP P
DAF	35.329	233.32	8.50	38.61	I	C	LP P
SGH	35.387	232.99	8.50	38.59	I	C	LP P
HLD	35.400	233.43	8.50	38.59	E	C	LP P
CMP	35.431	299.25	8.50	38.58	I	C	SP P
PVL	35.444	295.59	8.50	38.58	I	D	SP P
KDZ	35.454	292.98	8.49	38.57	I	C	SP P
BJI	35.636	69.75	8.48	38.51	I	C	LP P
COZ	35.920	299.36	8.47	38.42	I	C	SP P
NPS	36.434	282.25	8.44	38.26	I	C	SP P
WHN	36.593	85.98	8.43	38.21	I	C	SP P
MMB	36.668	293.14	8.42	38.19	I	C	SP P
DEV	36.911	300.37	8.41	38.10	I	C	SP P
VTS	36.938	294.89	8.41	38.10	I	C	SP P

Table 131. Station data for event 175 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
ATH	37.286	287.22	8.38	37.98	I	C	SP P
VAY	37.567	292.90	8.37	37.89	I	C	SP P
LIT	37.819	290.95	8.35	37.81	I	C	SP P
NUR	37.991	324.58	8.34	37.76	I	C	SP P
NUR	37.991	324.58	8.34	37.76	I	C	LP P
KJF	38.089	331.02	8.34	37.73	I	C	SP P
SUF	38.108	328.36	8.34	37.72	I	C	SP P
SKO	38.313	294.14	8.32	37.65	I	C	SP P
KZN	38.327	291.43	8.32	37.65	I	C	SP P
JOS	38.466	304.70	8.31	37.61	I	C	SP P
SPC	38.659	305.82	8.30	37.56	I	C	SP P
PSZ	38.908	303.79	8.30	37.51	I	D	SP P
GZH	38.933	97.60	8.30	37.51	I	C	SP P
BUD	39.512	303.14	8.26	37.33	I	C	SP P
VLS	39.651	288.41	8.25	37.28	I	C	SP P
ZST	40.767	304.35	8.19	36.97	I	C	SP P
SNY	40.885	65.44	8.19	36.94	I	C	SP P
KEV	41.041	338.48	8.18	36.90	I	C	LP P
SOP	41.166	303.60	8.17	36.86	I	C	SP P
KSP	41.201	308.42	8.17	36.85	I	C	SP P
VIE	41.259	304.47	8.17	36.83	I	C	LP P
VKA	41.287	304.50	8.16	36.82	I	C	SP P
ZAG	41.737	300.85	8.14	36.68	I	C	SP P
SSE	41.897	81.86	8.13	36.62	E	C	LP P
CN2	41.919	62.16	8.13	36.62	I	C	SP P
PRU	42.350	307.19	8.11	36.53	I	C	SP P
BRG	42.688	308.53	8.09	36.44	I	C	SP P
KMR	42.762	304.37	8.09	36.41	I	C	LP P
CEY	42.828	300.94	8.08	36.39	I	C	SP P
BRN	43.097	310.82	8.07	36.30	I	C	SP P
VOY	43.157	301.44	8.06	36.28	I	C	SP P
CLL	43.261	309.21	8.06	36.25	I	C	SP P
TRI	43.292	300.99	8.05	36.24	I	C	SP P
KBA	43.399	303.03	8.05	36.21	I	C	SP P
TRO	43.498	336.42	8.04	36.18	I	C	LP P
WET	43.490	306.06	8.04	36.18	I	C	SP P
COP	43.551	315.59	8.04	36.16	I	C	LP P
MOX	44.179	308.33	8.00	35.97	I	C	LP P
MOX	44.179	308.33	8.00	35.97	I	C	SP P
GRF	44.516	307.00	7.99	35.91	I	C	SP P
GRFO	44.520	307.00	7.99	35.91	I	C	LP P
ANP	44.551	89.56	7.99	35.90	I	C	LP P
TATO	44.622	89.84	7.99	35.88	I	C	LP P
FUR	44.653	304.83	7.98	35.88	I	C	SP P
OGA	45.001	303.04	7.96	35.76	I	C	SP P
KONO	45.231	321.19	7.95	35.69	I	C	LP P
MUD	45.388	316.68	7.94	35.64	I	C	SP P
OSS	45.628	302.92	7.92	35.57	I	C	SP P
STU	45.945	305.93	7.91	35.47	I	C	LP P
SAX	46.076	303.82	7.90	35.43	I	C	SP P

Table 131. Station data for event 175 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
VDL	46.120	302.75	7.89	35.41	I	C	SP	P
TNS	46.236	308.02	7.89	35.38	I	C	SP	P
LLS	46.374	303.35	7.88	35.33	I	C	SP	P
SLE	46.561	304.65	7.87	35.28	I	C	SP	P
BUH	46.593	305.93	7.87	35.27	I	C	SP	P
TMA	46.595	302.34	7.87	35.27	I	C	SP	P
ZUL	46.677	304.28	7.86	35.24	I	C	SP	P
BNS	46.949	309.17	7.85	35.16	I	C	SP	P
WTS	47.050	310.61	7.84	35.13	I	C	SP	P
STB	47.209	308.71	7.83	35.08	I	C	SP	P
MMK	47.226	302.43	7.83	35.07	I	C	SP	P
DIX	47.599	302.57	7.81	34.96	I	C	SP	P
SUE	47.673	323.04	7.80	34.93	I	D	SP	P
BSF	47.680	305.01	7.80	34.93	I	C	SP	P
ENN	47.762	309.06	7.80	34.92	I	C	SP	P
EMS	47.928	302.65	7.79	34.87	I	C	LP	P
HAU	47.942	305.32	7.79	34.86	I	C	SP	P
DBN	48.038	310.93	7.78	34.82	I	C	LP	P
LPG	48.172	301.94	7.77	34.76	I	C	SP	P
BAG	48.223	100.57	7.76	34.74	E	C	LP	P
FRF	48.693	299.44	7.72	34.50	I	C	SP	P
DOU	48.707	308.35	7.72	34.49	I	C	LP	P
UCC	48.738	309.30	7.71	34.48	E	C	LP	P
NAI	48.862	227.89	7.70	34.44	I	C	LP	P
LRG	48.921	299.37	7.70	34.41	I	C	SP	P
LBF	49.724	304.42	7.64	34.09	I	C	SP	P
SHK	49.743	72.62	7.63	34.08	I	C	SP	P
LOR	49.740	304.81	7.63	34.08	I	C	SP	P
SMF	49.891	304.02	7.62	34.02	I	C	SP	P
SSF	50.021	304.61	7.61	33.96	I	C	SP	P
AVF	50.185	304.30	7.60	33.90	I	C	SP	P
BGF	50.579	304.11	7.57	33.74	I	C	SP	P
MZF	50.838	303.74	7.55	33.63	I	C	SP	P
TCF	51.072	303.92	7.53	33.54	I	C	SP	P
CAF	51.524	302.26	7.49	33.36	I	C	SP	P
LSF	51.538	304.02	7.49	33.35	I	C	SP	P
RJF	51.796	302.86	7.47	33.25	I	C	SP	P
ESY	51.990	316.78	7.45	33.17	I	C	SP	P
LDF	52.037	307.27	7.45	33.15	I	C	SP	P
LPO	52.191	302.19	7.44	33.09	I	C	SP	P
FLN	52.227	307.55	7.44	33.07	I	C	SP	P
LFF	52.425	302.61	7.42	33.00	I	C	SP	P
EBH	52.423	317.31	7.42	33.00	I	C	SP	P
ELO	52.493	317.61	7.41	32.97	I	C	SP	P
MFF	52.563	304.84	7.41	32.94	I	C	SP	P
LPF	52.772	306.78	7.39	32.86	I	C	SP	P
EAB	52.891	317.34	7.38	32.81	I	C	SP	P
MAT	53.243	68.16	7.35	32.67	I	C	SP	P
MAJO	53.243	68.16	7.35	32.67	I	C	LP	P
EPF	53.263	300.43	7.35	32.66	I	C	SP	P

Table 131. Station data for event 175 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
ETA	54.755	313.43	7.24	32.11	I	C	SP P
TSK	54.790	67.84	7.24	32.10	I	C	SP P
ECP	54.986	312.85	7.22	32.02	I	C	SP P
ECB	55.179	313.16	7.21	31.94	I	C	SP P
LGR	55.430	300.59	7.19	31.84	I	C	SP P
AKU	57.224	330.50	7.05	31.18	I	C	SP P
BNG	57.369	249.37	7.04	31.12	I	C	SP P
BCAO	57.378	249.38	7.04	31.12	I	C	SP P
TOL	57.440	298.21	7.04	31.10	I	C	LP P
TOL	57.440	298.21	7.04	31.10	I	C	SP P
CRT	58.154	295.12	6.99	30.87	I	C	SP P
REY	59.242	329.34	6.90	30.44	I	C	SP P
ALE	59.348	353.60	6.89	30.40	I	C	SP P
PTO	60.154	301.13	6.83	30.09	I	C	SP P
PTO	60.154	301.13	6.83	30.09	E	C	LP P
IFR	60.823	291.86	6.78	29.83	I	C	SP P
MKS	61.386	121.55	6.73	29.61	I	C	SP P
LIS	61.532	298.81	6.72	29.55	I	C	SP P
CLK	61.682	219.80	6.71	29.49	I	C	SP P
AVE	62.633	292.61	6.63	29.13	I	C	SP P
KRI	65.521	223.84	6.40	28.02	I	C	SP P
GDH	67.269	341.39	6.25	27.31	I	C	LP P
MBC	67.677	2.61	6.22	27.15	I	C	SP P
BUL	68.752	222.59	6.13	26.75	I	C	SP P
GUMO	69.336	88.03	6.08	26.52	I	C	LP P
GUA	69.400	88.05	6.08	26.50	E	C	LP P
JOZ	73.029	215.52	5.82	25.29	I	C	SP P
SLR	73.477	219.46	5.79	25.17	I	C	LP P
SLR	73.477	219.46	5.79	25.17	I	C	LP P
EVA	73.705	218.40	5.78	25.09	I	C	SP P
INK	74.263	9.15	5.74	24.90	I	C	SP P
KIC	74.589	266.61	5.72	24.81	I	C	SP P
COL	74.838	16.00	5.70	24.74	I	C	SP P
COL	74.838	16.00	5.70	24.74	I	C	LP P
PRY	74.866	219.38	5.70	24.73	I	D	SP P
BFS	75.197	219.91	5.68	24.62	I	C	SP P
KNA	75.251	122.40	5.67	24.59	I	C	SP P
FRB	75.328	342.56	5.66	24.56	I	C	SP P
SWZ	76.191	220.83	5.61	24.32	I	C	SP P
WIN	77.358	229.75	5.54	24.00	I	C	SP P
MRWA	77.703	140.58	5.52	23.88	I	C	SP P
BAL	79.184	140.90	5.41	23.38	I	C	SP P
MBO	79.858	280.38	5.34	23.07	I	C	SP P
MUN	80.038	142.07	5.32	22.97	I	C	SP P
WBN	81.290	131.22	5.21	22.48	I	C	SP P
NWAO	81.313	141.92	5.21	22.47	I	C	LP P
NWAO	81.313	141.92	5.21	22.47	I	C	SP P
RSNT	81.601	2.52	5.18	22.36	I	C	LP P
KLG	81.830	137.73	5.16	22.27	I	C	SP P
ASPA	84.208	124.71	5.02	21.62	I	C	SP P

Table 131. Station data for event 175 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
ISQ	86.120	119.00	4.87	20.95	I	C	SP	P
FFC	89.262	355.81	4.71	20.25	I	C	SP	P
CTAO	90.563	114.50	4.70	20.18	E	C	LP	P
EDM	90.910	2.48	4.69	20.14	I	C	SP	P
GAC	93.006	337.06	4.64	19.91	I	C	LP	P
RSNY	93.728	335.93	4.61	19.78	I	C	LP	P
WES	94.503	332.84	4.59	19.69	E	C	LP	P
ADE	94.902	130.19	4.57	19.62	I	C	SP	P
YKM	95.151	4.30	4.56	19.57	I	C	SP	P
LDM	95.581	4.07	4.55	19.50	I	C	SP	P
LON	96.689	8.68	4.53	19.40	E	C	LP	P
SCP	98.180	336.48	4.50	19.27	I	C	LP	P
COR	98.618	10.13	4.49	19.23	I	C	SP	P
RSSD	99.953	356.21	4.44	19.03	E	C	LP	P
TUL	107.211	348.62	1.89	7.97	E	C	LP	PKP
SHA	110.610	340.67	1.89	7.97	I	C	LP	PKP
SJG	112.375	315.38	1.89	7.97	E	C	LP	PKP
IIT	124.151	347.50	1.87	7.88	I	C	SP	PKP
TPM	124.316	348.34	1.87	7.88	I	C	SP	PKP
SBA	126.306	164.84	1.86	7.86	I	C	SP	PKP
UPA	127.110	322.16	1.86	7.85	E	C	LP	PKP
BOG	127.764	313.45	1.86	7.84	E	C	LP	PKP
LPB	138.662	287.24	1.78	7.52	E	C	LP	PKP
BACH	148.197	263.57	1.61	6.78	I	C	SP	PKP
PEL	148.295	264.03	1.61	6.77	I	C	LP	PKP
SAN	148.362	263.46	1.60	6.76	I	C	SP	PKP

Table 132. Station data for event 183.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
QUE	11.450	218.88	13.54	42.76	I	C	LP P
BOM	20.568	186.50	10.35	31.27	I	D	SP P
POO	20.857	183.66	10.21	30.80	I	D	SP P
CHG	29.023	128.24	9.05	26.99	I	D	SP P
CHTO	29.023	128.24	9.05	26.99	E	D	LP P
BJI	31.305	75.57	8.80	26.19	I	D	LP P
CRI	32.969	270.91	8.69	25.83	I	C	SP P
MOI	33.118	269.13	8.69	25.83	I	C	SP P
NOH	33.864	267.68	8.63	25.64	I	C	SP P
ISK	34.961	287.84	8.56	25.42	I	C	SP P
MLR	36.390	296.01	8.48	25.17	I	C	SP P
HLW	37.036	268.82	8.45	25.07	I	C	SP P
NUR	37.526	321.13	8.42	24.98	I	C	LP P
SRE	38.441	295.20	8.36	24.79	I	C	SP P
MMB	38.741	290.26	8.36	24.79	I	C	SP P
VTS	38.879	291.98	8.33	24.69	I	C	SP P
SNG	39.395	137.90	8.30	24.60	I	D	LP P
KEV	39.410	335.86	8.30	24.60	I	C	LP P
THE	39.547	289.04	8.30	24.60	I	C	SP P
ATH	39.778	284.79	8.27	24.50	I	C	SP P
ARO	39.943	234.83	8.27	24.50	I	C	LP P
BUD	40.797	300.38	8.22	24.34	I	C	SP P
SOP	42.402	301.13	8.14	24.09	I	C	SP P
COP	43.790	313.29	8.05	23.81	I	C	LP P
KMR	43.926	302.15	8.05	23.81	I	C	LP P
CLL	44.030	306.96	8.05	23.81	I	C	SP P
KHC	44.065	303.77	8.05	23.81	I	C	SP P
LJU	44.116	299.24	8.05	23.81	I	C	SP P
CEY	44.263	298.84	8.03	23.75	I	C	SP P
WET	44.512	303.93	8.03	23.75	I	C	SP P
VOY	44.551	299.38	8.03	23.75	I	C	SP P
KBA	44.665	300.96	8.03	23.75	I	C	SP P
TRI	44.719	298.97	8.03	23.75	I	C	SP P
BHG	44.823	301.95	8.00	23.65	I	C	SP P
HOF	44.913	305.74	8.00	23.65	I	C	SP P
KONO	44.991	319.13	8.00	23.65	I	C	LP P
MOX	45.012	306.25	8.00	23.65	I	C	LP P
MOX	45.012	306.25	8.00	23.65	I	C	SP P
GRF	45.456	305.01	7.97	23.56	I	C	SP P
GRFO	45.460	305.01	7.97	23.56	E	C	LP P
MUD	45.523	314.68	7.97	23.56	I	C	SP P
BAG	45.577	107.03	7.97	23.56	E	D	LP P
FUR	45.766	302.91	7.94	23.46	I	C	SP P
STU	46.962	304.19	7.88	23.28	I	C	LP P
BNS	47.695	307.52	7.85	23.18	I	C	SP P
STB	47.991	307.11	7.82	23.09	I	C	SP P
CDF	48.286	304.17	7.79	22.99	I	C	SP P
DBN	48.633	309.41	7.79	22.99	I	C	LP P
BSF	48.760	303.55	7.75	22.87	I	C	SP P
MAJO	48.831	72.39	7.75	22.87	E	C	LP P

Table 132. Station data for event 183 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
LPG	49.495	300.62	7.71	22.75	I	C	SP P
FRF	50.210	298.26	7.67	22.62	I	C	SP P
LRG	50.442	298.23	7.63	22.50	I	C	SP P
LOR	50.824	303.64	7.59	22.37	I	C	SP P
LBF	50.840	303.26	7.59	22.37	I	C	SP P
SMF	51.039	302.89	7.59	22.37	I	C	SP P
SSF	51.119	303.49	7.59	22.37	I	C	SP P
AVF	51.308	303.21	7.55	22.25	I	C	SP P
BGF	51.715	303.08	7.55	22.25	I	C	SP P
MZF	52.003	302.75	7.51	22.12	I	C	SP P
TCF	52.221	302.95	7.51	22.12	I	C	SP P
LSF	52.676	303.11	7.47	22.00	I	C	SP P
CAF	52.803	301.39	7.42	21.84	I	C	SP P
LDF	52.909	306.36	7.42	21.84	I	C	SP P
EAB	52.925	316.43	7.42	21.84	I	C	SP P
RJF	53.026	302.01	7.42	21.84	I	C	SP P
FLN	53.075	306.66	7.42	21.84	I	C	SP P
GRR	53.440	306.33	7.38	21.72	I	C	SP P
LPO	53.473	301.40	7.38	21.72	I	C	SP P
MFF	53.630	304.04	7.38	21.72	I	C	SP P
NAI	53.650	230.48	7.38	21.72	I	C	LP P
NAI	53.650	230.48	7.38	21.72	I	C	SP P
LFF	53.671	301.84	7.38	21.72	I	C	SP P
LPF	53.681	305.97	7.38	21.72	I	C	SP P
EPF	54.679	299.81	7.30	21.47	I	C	SP P
ETA	55.105	312.79	7.26	21.35	I	C	SP P
ECP	55.382	312.25	7.23	21.26	I	C	SP P
ECB	55.550	312.57	7.23	21.26	I	C	SP P
TOL	59.011	298.12	6.97	20.46	I	C	LP P
ALM	59.322	294.32	6.93	20.34	I	C	SP P
MAL	60.755	295.07	6.81	19.97	I	C	LP P
PTO	61.483	301.28	6.77	19.85	I	C	SP P
PTO	61.483	301.28	6.77	19.85	I	C	LP P
BNG	61.783	250.99	6.73	19.72	I	C	SP P
IFR	62.867	292.26	6.65	19.48	I	C	SP P
GDH	65.282	342.18	6.44	18.84	I	C	LP P
GUMO	65.818	92.08	6.40	18.72	E	D	LP P
MTD	69.176	225.02	6.15	17.96	I	C	SP P
KRI	70.309	226.63	6.04	17.63	I	C	SP P
COL	70.701	17.96	6.04	17.63	I	C	LP P
BUL	73.535	225.40	5.82	16.97	I	C	LP P
RSNT	78.138	4.64	5.52	16.07	I	C	LP P
SLR	78.238	222.31	5.52	16.07	I	C	LP P
PRY	79.626	222.21	5.42	15.77	I	C	SP P
SEK	80.679	221.28	5.31	15.44	I	C	SP P
NWAO	81.843	145.34	5.18	15.06	I	D	LP P
FFC	86.194	358.37	4.91	14.25	I	C	SP P
SUR	87.459	223.54	4.80	13.93	I	C	SP P
CTAO	88.813	117.24	4.73	13.72	E	D	LP P
TUH	89.054	224.03	4.73	13.72	I	C	SP P

Table 132. Station data for event 183 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
RSON	89.574	353.01	4.72	13.69	I	C	LP	P
GAC	91.272	339.94	4.69	13.60	I	C	LP	P
YKM	91.565	7.20	4.69	13.60	I	C	SP	P
LDM	92.007	7.00	4.67	13.54	I	C	SP	P
RSNY	92.080	338.87	4.67	13.54	I	C	LP	P
CLX	92.267	6.91	4.66	13.51	I	C	SP	P
LON	92.869	11.64	4.65	13.48	I	C	LP	P
WES	93.097	335.85	4.65	13.48	I	C	LP	P
ADE	94.406	132.51	4.60	13.34	I	C	SP	P
SCP	96.475	339.77	4.54	13.16	I	C	LP	P
RSSD	96.838	359.46	4.53	13.13	I	C	LP	P
HON	101.751	49.72	4.45	12.89	E	C	LP	Pdf
SHA	108.546	344.92	1.89	5.44	E	C	LP	PKP
SJG	112.339	320.07	1.89	5.44	E	C	LP	PKP
UPA	126.443	328.42	1.86	5.36	E	C	LP	PKP
BOG	127.817	319.88	1.86	5.35	E	C	LP	PKP
LPB	140.777	295.03	1.75	5.05	I	C	LP	PKP
ROCH	152.111	272.77	1.50	4.31	I	C	SP	PKP

Table 133. Station data for event 204.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
QUE	10.347	194.02	13.64	53.27	I	C	LP	P
NDI	13.073	150.04	13.29	51.34	I	C	SP	P
KKN	17.836	129.60	12.38	46.67	I	C	SP	P
DMN	17.870	130.37	12.38	46.67	I	C	SP	P
PKI	18.075	129.79	12.38	46.67	I	C	SP	P
POO	21.954	169.75	9.95	35.78	I	C	SP	P
GTA	22.992	82.43	9.76	34.99	I	C	SP	P
HYB	24.007	159.15	9.60	34.34	I	C	SP	P
ANTO	28.215	281.31	9.18	32.64	I	C	LP	P
BTO	30.405	76.15	8.86	31.37	I	C	SP	P
PSN	30.912	290.19	8.82	31.22	I	D	SP	P
MLR	32.266	294.01	8.72	30.82	I	D	SP	P
JMB	32.272	288.27	8.72	30.82	I	C	SP	P
HLW	32.949	263.77	8.68	30.67	I	C	SP	P
PVL	33.165	289.87	8.68	30.67	I	D	SP	P
KDZ	33.340	287.13	8.65	30.55	I	D	SP	P
MMB	34.537	287.54	8.59	30.31	I	D	SP	P
VAY	35.446	287.45	8.53	30.08	I	D	SP	P
ATH	35.541	281.49	8.53	30.08	I	C	SP	P
KRA	35.898	302.77	8.50	29.96	I	D	SP	P
KEV	36.958	336.82	8.44	29.73	E	C	LP	P
ARO	37.249	227.28	8.44	29.73	I	C	LP	P
KSP	38.160	304.38	8.38	29.50	I	D	SP	P
BRG	39.637	304.68	8.29	29.15	I	C	SP	P
SNY	40.006	69.65	8.27	29.07	I	C	SP	P
LJU	40.053	297.13	8.27	29.07	I	D	SP	P
KHC	40.115	302.03	8.27	29.07	I	C	SP	P
COP	40.162	312.28	8.27	29.07	E	C	LP	P
QIZ	40.271	109.78	8.24	28.96	I	C	SP	P
GZH	40.362	101.75	8.24	28.96	I	C	SP	P
KBA	40.641	298.96	8.24	28.96	I	C	SP	P
TRI	40.650	296.81	8.24	28.96	I	C	SP	P
HKC	41.438	102.03	8.18	28.73	I	C	LP	P
GRFO	41.543	303.27	8.18	28.73	E	C	LP	P
KONO	41.610	318.40	8.18	28.73	E	N	LP	P
SSE	42.203	85.90	8.16	28.65	I	C	LP	P
STU	43.021	302.31	8.10	28.42	I	C	LP	P
MDJ	43.454	63.79	8.07	28.31	I	C	SP	P
SEO	43.876	74.38	8.05	28.23	E	C	LP	P
CVF	44.898	293.78	7.99	28.00	I	C	SP	P
ANP	45.394	93.07	7.96	27.89	I	C	LP	P
TATO	45.483	93.33	7.96	27.89	I	C	LP	P
UCC	45.633	306.13	7.96	27.89	E	C	LP	P
DOU	45.650	305.12	7.96	27.89	E	C	LP	P
CDR	46.691	296.26	7.91	27.70	I	C	SP	P
AVF	47.337	301.04	7.85	27.47	I	C	SP	P
MZF	48.020	300.52	7.81	27.32	I	C	SP	P
LSF	48.702	300.87	7.78	27.20	I	C	SP	P
LDF	49.028	304.30	7.74	27.05	I	C	SP	P
SHK	49.336	75.58	7.70	26.90	I	C	LP	P

Table 133. Station data for event 204 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BAG	49.807	103.35	7.66	26.75	E	C	LP	P
NAI	51.170	224.39	7.58	26.45	I	C	SP	P
NAI	51.170	224.39	7.58	26.45	I	C	LP	P
MAT	52.499	70.69	7.46	26.00	I	C	SP	P
MAT	52.499	70.69	7.46	26.00	I	C	LP	P
MAJO	52.499	70.69	7.46	26.00	I	C	LP	P
TOL	54.919	295.39	7.26	25.25	I	C	LP	P
TOL	54.919	295.39	7.26	25.25	I	C	SP	P
MAL	56.609	292.16	7.14	24.81	I	C	LP	P
PTO	57.459	298.62	7.07	24.55	I	C	LP	P
BNG	58.229	246.22	7.03	24.40	I	C	SP	P
BCAO	58.238	246.22	7.03	24.40	I	C	LP	P
GDH	63.143	340.51	6.64	22.96	E	C	LP	P
MKS	64.201	122.55	6.56	22.67	I	C	SP	P
GUMO	69.976	88.97	6.07	20.90	E	C	LP	P
INK	70.325	9.01	6.03	20.75	I	C	SP	P
COL	71.095	15.98	5.99	20.61	I	C	LP	P
SLR	76.213	218.02	5.64	19.35	I	C	SP	P
SLR	76.213	218.02	5.64	19.35	I	C	LP	P
RSNT	77.528	2.10	5.55	19.03	I	C	LP	P
BFS	77.906	218.57	5.52	18.93	I	C	SP	P
WIN	79.484	228.43	5.41	18.54	I	C	SP	P
WR3	84.792	121.46	4.99	17.05	I	C	SP	P
NWAO	85.002	141.57	4.99	17.05	I	C	LP	P
ASPA	87.152	124.35	4.83	16.49	I	C	SP	P
RSON	88.102	349.64	4.77	16.28	I	C	LP	P
GAC	88.937	336.49	4.73	16.14	I	C	LP	P
RSNY	89.677	335.38	4.71	16.07	I	C	LP	P
LON	92.734	7.99	4.66	15.89	E	C	LP	P
CTAO	92.927	113.81	4.64	15.82	E	C	LP	P
CTA	92.927	113.81	4.64	15.82	I	C	SP	P
CTA	92.927	113.81	4.64	15.82	I	C	LP	P
SCP	94.119	335.99	4.61	15.72	E	C	LP	P
SHA	106.489	340.31	1.89	6.38	E	C	LP	PKP
LPB	136.619	290.65	1.80	6.08	E	C	LP	PKP
PEL	147.758	270.09	1.62	5.45	I	C	SP	PKP

Table 134. Station data for event 209.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BHD	9.193	251.13	13.81	54.24	I	C	SP	P
QUE	12.062	119.14	13.43	52.11	I	C	LP	P
JER	16.921	258.79	12.58	47.66	I	C	SP	P
HRT	19.984	289.52	10.44	37.84	I	D	SP	P
YLV	20.194	288.75	10.44	37.84	I	D	SP	P
ISK	20.461	290.14	10.31	37.29	I	C	SP	P
NDI	20.478	106.56	10.31	37.29	I	C	SP	P
CTT	20.941	290.28	10.17	36.70	I	D	SP	P
YER	21.172	279.13	10.17	36.70	I	D	SP	P
BNT	21.295	288.05	10.05	36.20	I	D	SP	P
EDC	21.338	288.02	10.05	36.20	I	D	SP	P
TLB	21.698	299.56	10.05	36.20	I	D	SP	P
IZM	21.855	282.76	9.95	35.78	I	D	SP	P
PRK	22.579	285.12	9.85	35.37	I	D	SP	P
BRD	22.580	301.56	9.85	35.37	I	D	SP	P
ISR	22.847	300.40	9.76	34.99	I	D	SP	P
VRI	22.884	302.31	9.76	34.99	I	D	SP	P
BUC1	23.063	298.23	9.76	34.99	I	D	SP	P
CVO	23.248	301.97	9.76	34.99	I	D	SP	P
KDZ	23.281	291.26	9.68	34.67	I	D	SP	P
MLR	23.335	301.06	9.68	34.67	I	D	SP	P
PLD	23.786	292.37	9.60	34.34	I	C	SP	P
BOM	23.792	133.40	9.60	34.34	I	C	SP	P
MMB	24.495	291.04	9.53	34.05	I	D	SP	P
ATH	24.677	282.36	9.53	34.05	I	D	SP	P
POO	24.684	132.08	9.53	34.05	I	C	SP	P
VTS	24.925	293.42	9.47	33.81	I	D	SP	P
VAY	25.363	290.39	9.42	33.61	I	D	SP	P
DEV	25.501	301.03	9.42	33.61	I	C	SP	P
KZN	25.995	288.08	9.38	33.45	I	D	SP	P
SKO	26.212	291.88	9.38	33.45	I	D	SP	P
OBO	26.702	205.70	9.33	33.25	I	D	SP	P
OHR	26.703	289.96	9.33	33.25	I	D	SP	P
VLS	27.101	283.53	9.28	33.04	I	D	SP	P
KKN	27.195	100.30	9.28	33.04	I	C	SP	P
ATA	27.224	205.46	9.28	33.04	E	C	LP	P
ARO	27.284	206.24	9.23	32.84	I	C	LP	P
HLD	27.371	207.12	9.23	32.84	E	C	LP	P
PKI	27.396	100.61	9.23	32.84	I	C	SP	P
KSU	27.439	207.03	9.23	32.84	E	C	LP	P
SGH	27.444	206.59	9.23	32.84	I	C	LP	P
KRA	28.337	309.11	9.11	32.36	I	D	SP	P
BUD	28.399	303.55	9.11	32.36	I	D	SP	P
HYB	28.458	126.13	9.11	32.36	I	C	SP	P
ZST	29.788	304.59	8.91	31.57	I	D	SP	P
SOP	30.079	303.47	8.91	31.57	I	D	SP	P
VKA	30.317	304.57	8.86	31.37	I	D	SP	P
KSP	30.788	309.56	8.82	31.22	I	D	SP	P
LSA	31.090	92.32	8.82	31.22	I	C	SP	P
LJU	31.321	300.03	8.79	31.10	I	D	SP	P

Table 134. Station data for event 209 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
PRU	31.730	307.54	8.79	31.10	I	D	SP	P
KMR	31.745	303.83	8.79	31.10	I	D	LP	P
VOY	31.765	299.97	8.75	30.94	I	D	SP	P
TRI	31.844	299.35	8.75	30.94	I	D	SP	P
KBA	32.197	301.90	8.75	30.94	I	D	SP	P
KHC	32.230	305.77	8.75	30.94	I	D	SP	P
BRG	32.254	309.07	8.72	30.82	I	D	SP	P
BHG	32.556	303.06	8.72	30.82	I	D	SP	P
WET	32.687	305.70	8.72	30.82	I	D	SP	P
CLL	32.915	309.68	8.68	30.67	I	D	SP	P
BRN	33.001	311.73	8.68	30.67	I	D	SP	P
UPP	33.168	326.14	8.68	30.67	I	D	SP	P
MOX	33.681	308.24	8.65	30.55	I	D	LP	P
MOX	33.681	308.24	8.65	30.55	I	D	SP	P
OGA	33.775	301.39	8.62	30.43	I	D	SP	P
GRF	33.822	306.48	8.62	30.43	I	D	SP	P
COP	34.219	317.27	8.62	30.43	I	D	SP	P
COP	34.219	317.27	8.62	30.43	I	D	LP	P
OSS	34.378	301.05	8.59	30.31	I	D	SP	P
VDL	34.842	300.70	8.56	30.20	I	D	SP	P
SAX	34.931	302.03	8.56	30.20	I	D	SP	P
STU	35.078	304.68	8.56	30.20	I	D	SP	P
STU	35.078	304.68	8.56	30.20	I	D	LP	P
LLS	35.167	301.36	8.56	30.20	I	D	SP	P
TMA	35.261	300.04	8.53	30.08	I	D	SP	P
GTA	35.285	71.61	8.53	30.08	I	C	SP	P
CVF	35.494	293.94	8.53	30.08	I	D	SP	P
TNS	35.653	307.13	8.53	30.08	I	D	SP	P
MMK	35.894	299.98	8.50	29.96	I	D	SP	P
DIX	36.279	300.05	8.47	29.85	I	D	SP	P
CDF	36.340	303.99	8.47	29.85	I	D	SP	P
BNS	36.516	308.29	8.47	29.85	I	D	SP	P
EMS	36.613	300.06	8.47	29.85	I	D	SP	P
BSF	36.662	303.02	8.47	29.85	I	D	SP	P
LPG	36.769	299.11	8.44	29.73	I	D	SP	P
WTS	36.829	309.98	8.44	29.73	I	D	SP	P
KONO	36.835	323.06	8.44	29.73	I	D	SP	P
KONO	36.835	323.06	8.44	29.73	I	D	LP	P
HAU	36.960	303.31	8.44	29.73	I	D	SP	P
WIT	36.997	311.32	8.44	29.73	I	D	SP	P
FRF	37.007	295.91	8.44	29.73	I	D	SP	P
LMR	37.132	295.55	8.44	29.73	I	D	SP	P
LRG	37.226	295.77	8.44	29.73	I	D	SP	P
MEM	37.236	307.62	8.44	29.73	I	D	SP	P
ENN	37.296	307.88	8.41	29.62	I	D	SP	P
CDR	37.629	296.21	8.41	29.62	I	D	SP	P
DBN	37.843	310.02	8.38	29.50	I	D	LP	P
DOU	38.124	306.73	8.38	29.50	I	D	LP	P
DOU	38.124	306.73	8.38	29.50	I	D	SP	P
UCC	38.290	307.87	8.35	29.38	E	D	LP	P

Table 134. Station data for event 209 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
LBF	38.602	301.73	8.35	29.38	I	D	SP P
LOR	38.666	302.19	8.35	29.38	I	D	SP P
SMF	38.717	301.20	8.35	29.38	I	D	SP P
HYA	38.902	324.62	8.32	29.27	I	C	SP P
SSF	38.919	301.89	8.32	29.27	I	D	SP P
PLDF	38.921	300.14	8.32	29.27	I	D	SP P
AVF	39.042	301.47	8.32	29.27	I	D	SP P
LZH	39.149	75.76	8.32	29.27	I	C	SP P
PYM	39.368	299.86	8.29	29.15	I	D	SP P
BGF	39.407	301.14	8.29	29.15	I	D	SP P
SUE	39.540	324.16	8.29	29.15	I	C	SP P
MZF	39.618	300.63	8.29	29.15	I	D	SP P
TCF	39.870	300.78	8.27	29.07	I	D	SP P
CAF	40.121	298.69	8.27	29.07	I	D	SP P
LSF	40.343	300.80	8.24	28.96	I	D	SP P
RJF	40.459	299.35	8.24	28.96	I	D	SP P
CD2	40.752	83.41	8.21	28.84	I	C	SP P
LFF	41.052	298.90	8.21	28.84	I	D	SP P
MLS	41.115	295.87	8.21	28.84	I	D	SP P
LDF	41.252	304.52	8.18	28.73	I	D	SP P
NAI	41.319	207.86	8.18	28.73	I	C	SP P
NAI	41.319	207.86	8.18	28.73	I	C	LP P
MFF	41.457	301.52	8.18	28.73	I	D	SP P
FLN	41.476	304.81	8.18	28.73	I	D	SP P
EPF	41.639	296.12	8.18	28.73	I	D	SP P
GRR	41.756	304.28	8.16	28.65	I	D	SP P
LPF	41.911	303.76	8.16	28.65	I	D	SP P
KMI	42.346	91.88	8.13	28.54	I	C	LP P
KMI	42.346	91.88	8.13	28.54	I	C	SP P
CHG	42.539	102.55	8.13	28.54	I	C	SP P
CHTO	42.539	102.55	8.13	28.54	I	C	LP P
BTO	42.720	67.24	8.13	28.54	I	C	SP P
ALI	43.303	289.59	8.07	28.31	I	D	LP P
BDT	43.476	104.38	8.07	28.31	I	C	SP P
HHC	43.803	66.48	8.05	28.23	I	C	SP P
ETA	44.812	310.95	7.99	28.00	I	D	SP P
ECP	44.951	310.23	7.99	28.00	I	D	SP P
ECB	45.187	310.52	7.99	28.00	I	D	SP P
NST	45.271	105.28	7.96	27.89	I	C	SP P
TIY	45.291	70.53	7.96	27.89	I	C	SP P
TOL	45.561	292.75	7.96	27.89	I	D	LP P
TOL	45.561	292.75	7.96	27.89	I	D	SP P
KBS	45.741	349.41	7.96	27.89	I	D	SP P
CRT	45.999	289.02	7.94	27.81	I	D	SP P
BNG	46.213	234.72	7.94	27.81	I	C	SP P
BJI	47.411	66.28	7.85	27.47	E	C	LP P
IFR	48.418	284.90	7.78	27.20	I	D	SP P
PTO	48.550	295.71	7.78	27.20	I	D	SP P
PTO	48.550	295.71	7.78	27.20	I	D	LP P
AKU	50.234	329.01	7.66	26.75	I	D	SP P

Table 134. Station data for event 209 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
AVE	50.273	285.58	7.62	26.60	I	D	SP	P
SNG	50.993	113.65	7.58	26.45	I	C	SP	P
QIZ	51.080	94.57	7.58	26.45	I	C	SP	P
GZH	51.831	88.00	7.50	26.15	I	C	SP	P
NJ2	52.219	75.09	7.50	26.15	I	C	SP	P
SNY	52.220	61.84	7.50	26.15	I	C	SP	P
PSI	52.855	119.22	7.42	25.85	I	C	SP	P
HKC	52.880	88.38	7.42	25.85	I	C	LP	P
CN2	52.907	58.94	7.42	25.85	I	C	SP	P
SSE	54.425	75.14	7.30	25.40	E	C	LP	P
QZH	55.142	83.10	7.26	25.25	I	C	SP	P
SEO	56.175	65.60	7.18	24.95	I	C	LP	P
ALE	57.189	352.00	7.11	24.69	I	D	SP	P
ANP	57.356	81.32	7.07	24.55	I	C	LP	P
TATO	57.433	81.55	7.07	24.55	I	C	LP	P
MTD	57.531	206.57	7.07	24.55	I	C	SP	P
KRI	58.308	208.60	7.00	24.29	I	C	SP	P
TEN	59.189	284.19	6.96	24.14	I	C	SP	P
PIP	60.104	88.70	6.88	23.85	I	C	SP	P
BAG	61.101	90.56	6.80	23.55	E	C	LP	P
CVP	61.401	88.59	6.76	23.40	I	C	SP	P
SHK	61.646	66.54	6.76	23.40	I	C	LP	P
BUL	61.708	208.07	6.76	23.40	I	C	LP	P
BUL	61.708	208.07	6.76	23.40	I	C	SP	P
KIC	61.927	256.12	6.72	23.26	I	C	SP	P
GDH	62.220	337.51	6.72	23.26	I	D	LP	P
PGP	63.009	93.05	6.64	22.96	I	C	SP	P
MAT	64.731	62.22	6.51	22.49	I	C	LP	P
MAT	64.731	62.22	6.51	22.49	I	C	SP	P
SLR	66.940	205.94	6.31	21.76	I	C	LP	P
SLR	66.940	205.94	6.31	21.76	I	C	SP	P
BP1	67.432	205.98	6.26	21.58	I	C	SP	P
KSR	67.556	207.12	6.26	21.58	I	C	SP	P
PLP	67.565	92.68	6.26	21.58	I	C	SP	P
BFS	68.537	206.77	6.18	21.29	I	C	SP	P
SEK	69.542	205.43	6.10	21.00	I	C	SP	P
INK	75.119	3.18	5.71	19.60	I	D	SP	P
SUR	75.713	209.20	5.68	19.50	I	C	SP	P
CER	77.178	209.89	5.58	19.14	I	C	SP	P
COL	77.189	9.67	5.58	19.14	I	D	LP	P
COL	77.189	9.67	5.58	19.14	I	D	SP	P
RSNT	80.787	355.02	5.26	18.00	I	D	LP	P
GUA	82.147	79.05	5.18	17.72	I	C	LP	P
GAC	86.527	327.60	4.86	16.59	I	D	LP	P
FFC	86.768	346.74	4.83	16.49	I	D	SP	P
RSNY	87.019	326.36	4.83	16.49	I	D	LP	P
RSON	88.504	340.64	4.75	16.21	I	D	LP	P
EDM	89.852	352.90	4.71	16.07	I	C	SP	P
NWAO	90.536	131.78	4.70	16.03	I	C	LP	P
SCP	91.493	326.04	4.68	15.96	E	D	LP	P

Table 134. Station data for event 209 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
WB2	93.723	112.00	4.63	15.79	I	C	SP	P
WR2	93.734	112.00	4.63	15.79	I	C	SP	P
RSCP	99.179	328.22	4.48	15.26	E	D	LP	P
GOL	101.805	344.48	4.45	15.16	E	C	LP	Pdf
SJG	102.063	303.46	4.45	15.16	E	C	LP	Pdf
SHA	104.480	327.56	4.45	15.16	E	C	LP	Pdf
SPA	126.525	180.00	1.86	6.28	E	C	LP	PKP

Figure 51. Azimuthal equidistant map for geographic subdivision,
Southwest Indian Ocean.

FIRST MOTION FM LOCATIONS 1984–1985 SOUTHWEST INDIAN OCEAN

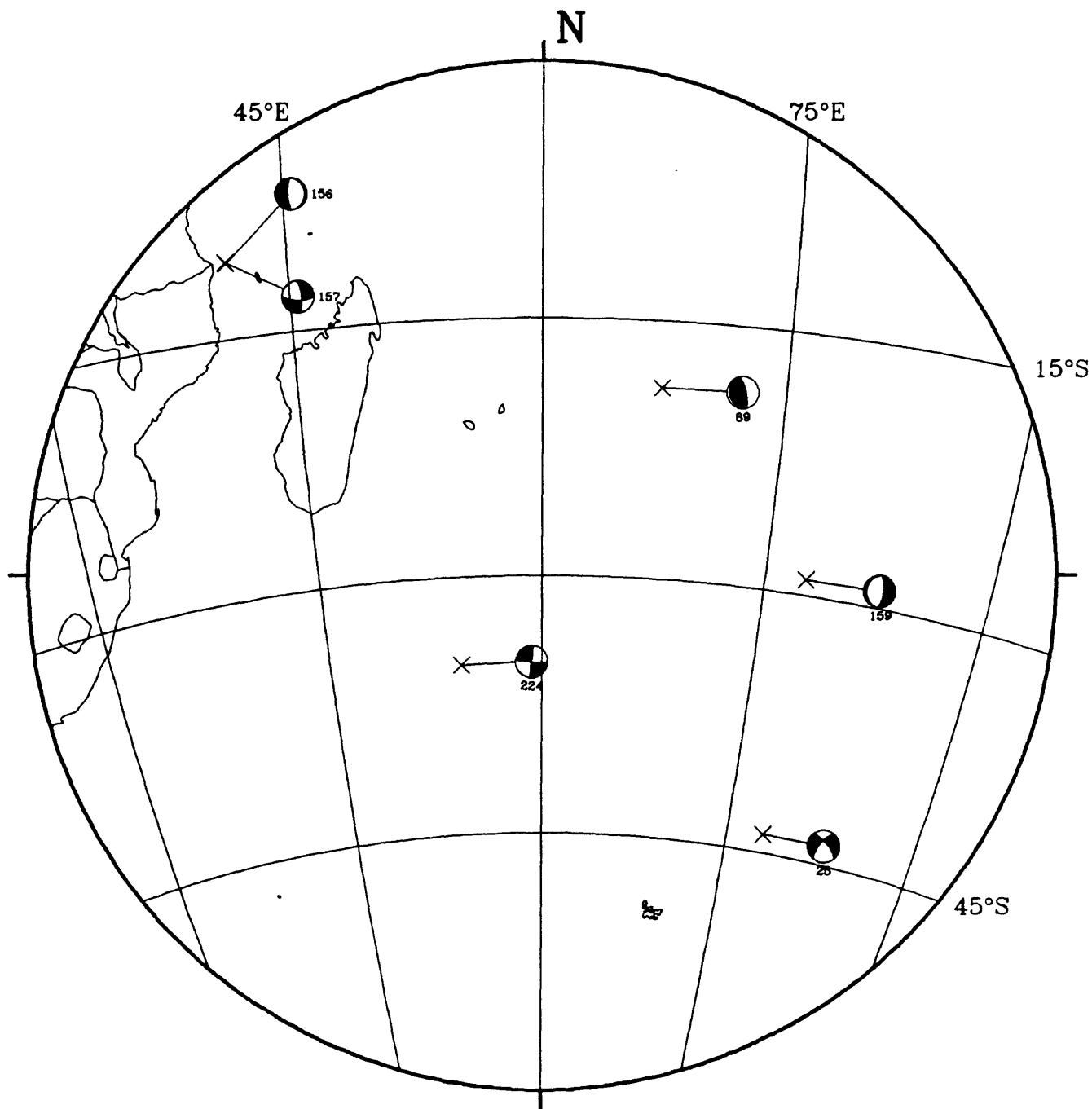
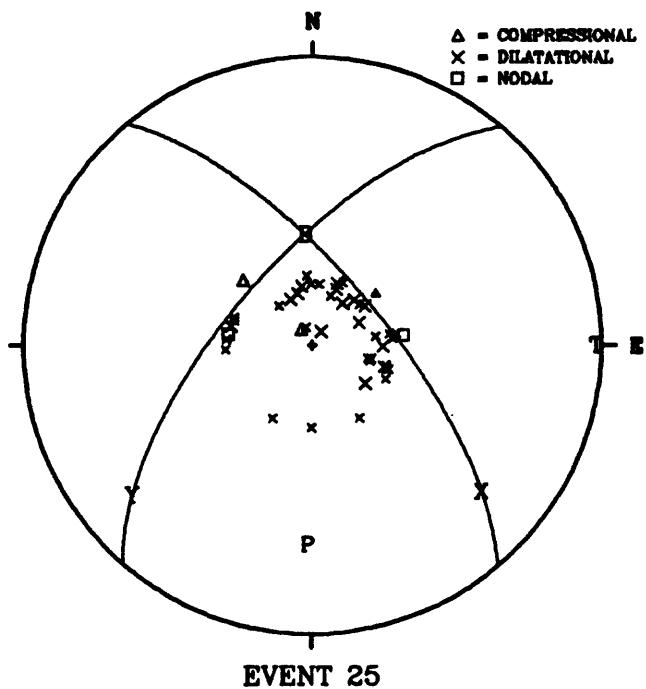


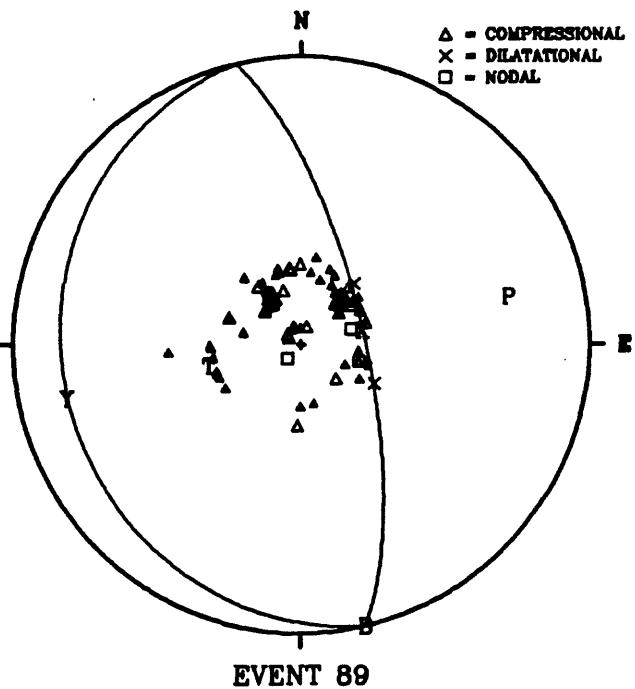
Table 135. Focal mechanism parameters for subdivision.
Southwest Indian Ocean

EVENT #	NODAL PLANE 1 (DEG)			NODAL PLANE 2 (DEG)			T AXIS (DEG)		P AXIS (DEG)		B AXIS (DEG)	
	ϑ	δ	λ	ϑ	δ	λ	PLG	AZM	PLG	AZM	PLG	AZM
25	320	70	-155	221	67	-22	2	90	32	181	58	356
89	347	72	90	167	18	90	63	257	27	77	0	167
156	177	73	-90	357	17	-90	28	267	62	87	0	177
157	353	72	-22	90	69	-161	2	42	28	311	62	136
159	8	70	-90	188	20	-90	25	98	65	278	0	8
224	95	87	0	185	90	-177	2	320	2	50	7	185

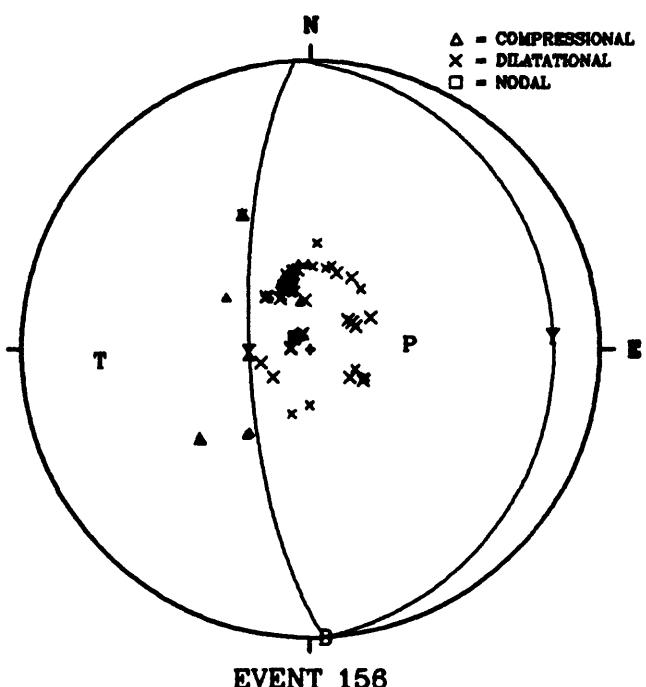
Figure 52. Lower hemisphere focal sphere projection for events 25, 89, 156, and 157.



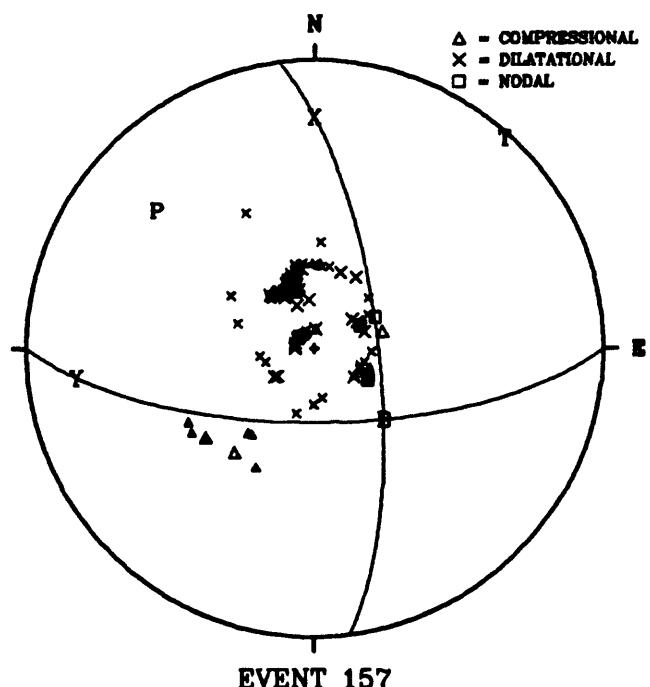
EVENT 25



EVENT 89



EVENT 156



EVENT 157

Figure 53. Lower hemisphere focal sphere projection for events 159, and 224.

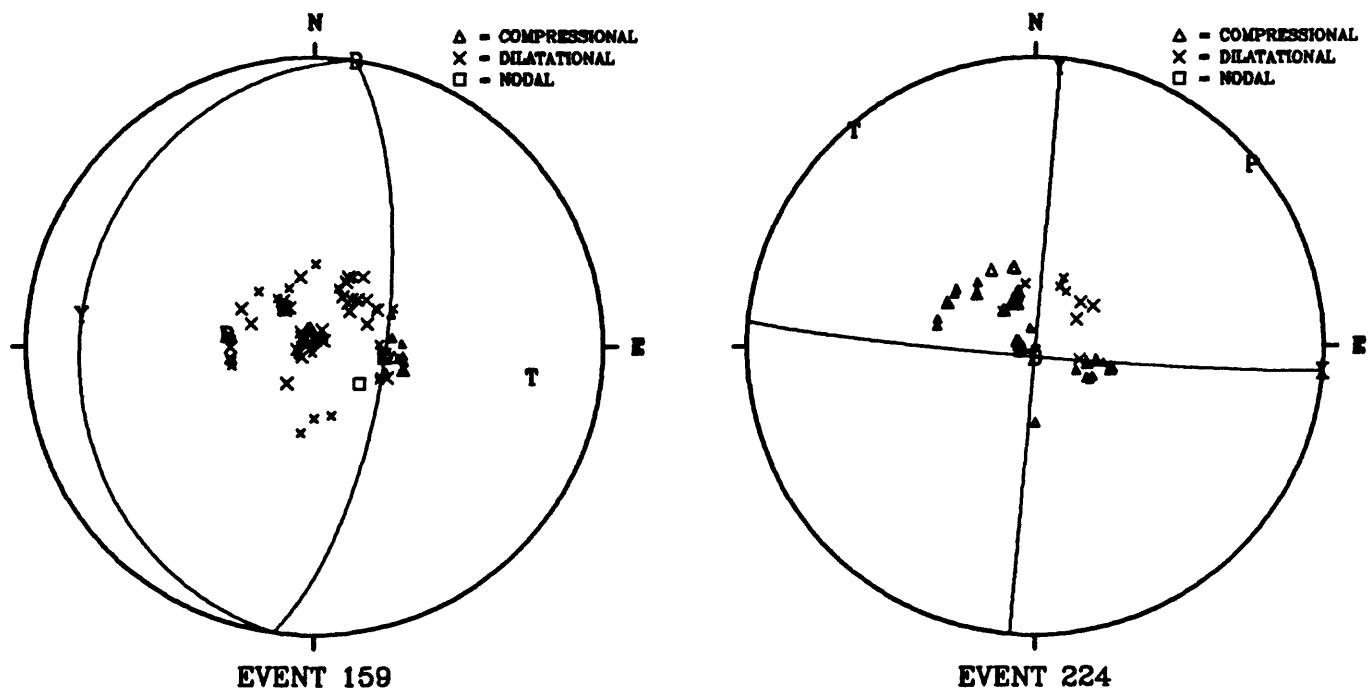


Table 136. Station data for event 25.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
PCR	29.305	313.56	8.98	26.78	E	C	LP P
NWAO	32.426	83.66	8.72	25.94	E	N	LP P
DRV	39.738	146.58	8.30	24.61	I	D	SP P
GRM	40.901	267.11	8.22	24.36	I	D	SP P
SEK	42.842	274.10	8.11	24.01	I	D	SP P
WBN	42.959	82.06	8.11	24.01	I	D	SP P
SLR	43.898	277.63	8.05	23.82	E	N	LP P
SNA	46.202	207.57	7.94	23.48	I	D	SP P
SPA	46.248	180.00	7.94	23.48	I	D	SP P
TRT	47.116	50.39	7.88	23.29	I	C	SP P
BUL	47.214	283.91	7.88	23.29	I	D	SP P
BUL	47.214	283.91	7.88	23.29	E	D	LP P
MTD	47.454	289.85	7.85	23.19	I	D	SP P
KRI	48.765	288.03	7.75	22.88	I	D	SP P
TAU	49.021	114.35	7.75	22.88	I	D	SP P
ASPA	49.723	85.01	7.71	22.76	I	D	SP P
TOO	50.298	107.31	7.63	22.51	I	D	SP P
WB2	52.400	81.67	7.46	21.98	I	D	SP P
WAM	53.340	107.57	7.38	21.73	I	D	SP P
YOU	54.009	105.29	7.34	21.61	I	D	SP P
RIV	56.184	106.38	7.19	21.14	E	D	LP P
CTA	60.877	90.44	6.81	19.98	I	D	LP P
CTAO	60.877	90.44	6.81	19.98	E	D	LP P
PCT	62.162	25.87	6.73	19.73	I	D	SP P
POO	62.278	355.64	6.69	19.61	I	D	SP P
CHG	65.353	21.96	6.44	18.85	I	D	SP P
CHTO	65.353	21.96	6.44	18.85	I	D	LP P
DAV	66.541	53.10	6.36	18.61	E	D	LP P
SNZO	67.021	125.65	6.31	18.46	I	D	LP P
PMG	68.596	82.31	6.19	18.09	I	D	SP P
CNP	70.456	49.01	6.04	17.64	I	D	SP P
PKI	71.493	7.01	5.96	17.40	I	D	SP P
DMN	71.504	6.73	5.96	17.40	I	D	SP P
BAG	71.599	43.28	5.96	17.40	E	D	LP P
KKN	71.698	6.87	5.96	17.40	I	D	SP P
NDI	72.272	359.36	5.89	17.19	I	D	SP P
KMI	72.401	23.53	5.89	17.19	E	D	LP P
KOU	73.482	102.72	5.82	16.98	I	D	SP P
NOU	73.855	105.47	5.79	16.89	I	D	SP P
QUE	74.449	350.16	5.75	16.77	I	D	LP P
PVC	78.192	103.19	5.52	16.08	I	D	SP P
MHI	81.600	345.05	5.22	15.18	I	D	LP P
LZH	83.065	20.90	5.12	14.88	I	D	SP P
GUMO	83.478	64.24	5.09	14.80	I	D	LP P
SSE	84.500	36.21	5.03	14.62	E	D	LP P
HLW	84.901	320.70	4.99	14.50	I	D	SP P
TAB	86.496	335.53	4.87	14.14	E	D	LP P
COP	113.586	325.78	1.88	5.42	E	C	LP PKP
DAG	133.814	341.51	1.83	5.26	I	D	SP PKP
IMA	144.533	33.44	1.68	4.85	I	D	SP PKP

Table 136. Station data for event 25 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
					I	D	LP	PKP
COL	147.208	34.32	1.64	4.72				

Table 137. Station data for event 89.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
AVY	18.567	266.68	12.32	38.18	I	C	SP P
TET	32.297	269.48	8.72	25.94	I	C	SP P
MTD	34.081	267.78	8.63	25.66	I	C	SP P
EVA	36.018	250.73	8.51	25.27	I	C	SP P
BUL	36.483	261.44	8.48	25.18	I	C	SP P
SLR	36.686	252.09	8.48	25.18	I	C	SP P
BPI	36.935	251.38	8.45	25.08	I	C	SP P
SEK	37.458	247.90	8.42	24.99	I	C	SP P
POO	37.714	10.11	8.42	24.99	I	C	SP P
BFS	38.089	250.30	8.39	24.89	I	C	SP P
VIR	38.105	248.39	8.39	24.89	I	C	SP P
ARO	38.682	319.43	8.36	24.80	I	C	SP P
GRM	39.087	240.17	8.33	24.70	I	C	SP P
NWAO	46.599	117.72	7.91	23.38	E	D	LP P
CHTO	48.626	41.40	7.79	23.01	I	D	LP P
QUE	48.773	359.54	7.75	22.88	I	C	LP P
MAW	48.794	182.28	7.75	22.88	I	C	LP P
DMN	49.300	20.91	7.71	22.76	I	C	SP P
PKI	49.368	21.26	7.71	22.76	I	C	SP P
KKN	49.526	21.01	7.71	22.76	I	C	SP P
SHI	50.305	343.17	7.63	22.51	I	C	SP P
BNG	53.337	290.72	7.38	21.73	I	C	SP P
BCAO	53.346	290.72	7.38	21.73	E	C	LP P
KHI	53.364	350.99	7.38	21.73	I	C	LP P
LSA	53.461	25.91	7.38	21.73	I	C	SP P
MHI	55.368	352.29	7.22	21.24	I	C	LP P
KMI	55.663	39.48	7.22	21.24	I	C	LP P
IR4	56.030	343.77	7.19	21.14	I	C	SP P
QIZ	56.195	50.27	7.19	21.14	I	C	SP P
KER	56.325	339.88	7.15	21.02	I	C	SP P
KSH	58.575	7.82	7.00	20.56	I	C	SP P
JER	59.044	328.09	6.97	20.47	I	C	SP P
HLW	59.591	323.68	6.93	20.35	I	C	LP P
GZH	61.283	49.04	6.77	19.86	I	C	SP P
ASPA	61.716	107.21	6.77	19.86	I	C	SP P
WB2	62.802	103.18	6.64	19.46	I	C	SP P
DAV	62.903	71.39	6.64	19.46	I	C	LP P
BAG	63.013	59.63	6.64	19.46	E	C	LP P
ADE	64.404	120.35	6.52	19.09	I	C	SP P
CVP	64.699	59.10	6.52	19.09	I	C	SP P
WMQ	65.110	16.11	6.48	18.97	I	C	SP P
GTA	65.436	27.21	6.44	18.85	I	C	SP P
XAN	65.847	37.15	6.40	18.73	I	C	SP P
QZH	66.212	50.68	6.40	18.73	I	C	SP P
WHN	66.758	43.37	6.31	18.46	I	C	SP P
IZM	68.260	326.99	6.19	18.09	I	C	SP P
TATO	68.376	52.30	6.19	18.09	E	N	LP P
ANP	68.515	52.13	6.19	18.09	I	C	LP P
TIY	70.461	36.58	6.04	17.64	I	C	SP P
DMK	70.619	329.67	6.04	17.64	I	C	SP P

Table 137. Station data for event 89 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BTO	71.227	33.03	6.00	17.52	I	C	SP	P
SPA	71.245	180.00	6.00	17.52	I	C	SP	P
KDZ	71.661	328.10	5.96	17.40	I	C	SP	P
SSE	71.690	46.85	5.96	17.40	I	C	SP	P
THE	72.152	325.99	5.93	17.31	I	C	SP	P
TLB	72.630	331.68	5.89	17.19	I	C	SP	P
VAY	72.854	326.27	5.86	17.10	I	C	SP	P
BUC1	73.363	330.36	5.82	16.98	I	C	SP	P
VTS	73.449	327.55	5.82	16.98	I	C	SP	P
SBA	73.653	167.42	5.82	16.98	I	C	SP	P
OHR	73.651	325.13	5.82	16.98	I	C	SP	P
CTAO	73.676	106.03	5.82	16.98	I	C	SP	P
CTAO	73.676	106.03	5.82	16.98	E	N	LP	P
ISR	73.727	331.19	5.82	16.98	I	C	SP	P
BRD	73.789	331.73	5.79	16.89	I	C	SP	P
SKO	73.912	326.12	5.79	16.89	I	C	SP	P
VRI	74.207	331.78	5.79	16.89	I	C	SP	P
MLR	74.271	331.09	5.75	16.77	I	C	SP	P
CVO	74.418	331.44	5.75	16.77	I	C	SP	P
CLI	74.484	332.54	5.75	16.77	I	C	SP	P
CMP	74.521	330.44	5.75	16.77	I	C	SP	P
COZ	74.887	330.10	5.72	16.68	I	C	SP	P
KIC	75.286	282.08	5.68	16.56	I	C	SP	P
CEA	75.398	332.10	5.68	16.56	I	C	SP	P
CLO	75.444	329.10	5.68	16.56	I	C	SP	P
DEV	75.985	329.72	5.65	16.47	I	C	SP	P
HNM	76.169	331.65	5.65	16.47	I	C	SP	P
VLR	76.337	330.50	5.62	16.38	I	C	SP	P
DL2	76.684	40.62	5.62	16.38	I	C	SP	P
PMG	77.430	95.74	5.56	16.20	I	C	SP	P
OBN	78.249	342.56	5.52	16.08	I	C	LP	P
PSZ	78.884	329.66	5.45	15.87	I	C	SP	P
JOS	78.986	330.39	5.45	15.87	I	C	SP	P
BUD	79.000	328.92	5.45	15.87	I	C	SP	P
MNS	79.061	322.00	5.45	15.87	I	C	SP	P
SEO	79.314	44.24	5.42	15.78	E	C	LP	P
SPC	79.616	330.74	5.42	15.78	I	C	SP	P
SNY	79.639	39.17	5.42	15.78	I	C	SP	P
KRA	80.371	331.22	5.31	15.45	I	C	SP	P
ZST	80.432	328.55	5.31	15.45	I	C	SP	P
VKA	80.867	328.25	5.27	15.33	I	C	SP	P
KBA	81.624	326.01	5.22	15.18	I	C	SP	P
KMR	81.837	327.12	5.18	15.06	I	C	LP	P
CN2	81.916	38.38	5.18	15.06	I	C	SP	P
BHG	82.275	326.32	5.15	14.97	I	C	SP	P
KSP	82.604	330.18	5.15	14.97	I	C	SP	P
OGA	82.740	324.85	5.15	14.97	I	C	SP	P
KHC	82.808	327.72	5.12	14.88	I	C	SP	P
GUMO	82.876	73.09	5.12	14.88	E	N	LP	P
PRU	82.881	328.78	5.12	14.88	I	C	SP	P

Table 137. Station data for event 89 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
OSS	83.114	324.34	5.12	14.88	E	C	LP	P
WET	83.172	327.43	5.12	14.88	I	C	SP	P
VDL	83.369	323.90	5.09	14.80	E	C	LP	P
FUR	83.396	325.99	5.09	14.80	I	C	SP	P
TMA	83.481	323.34	5.09	14.80	E	C	LP	P
BRG	83.745	329.22	5.09	14.80	I	C	SP	P
LLS	83.857	324.02	5.06	14.71	E	C	LP	P
SAX	83.889	324.47	5.06	14.71	E	C	LP	P
MMK	83.965	322.93	5.06	14.71	E	C	LP	P
DIX	84.299	322.73	5.03	14.62	E	C	LP	P
GRF	84.360	327.19	5.03	14.62	I	C	SP	P
GRFO	84.364	327.18	5.03	14.62	I	C	LP	P
HOF	84.411	327.94	5.03	14.62	I	C	SP	P
CLL	84.482	329.17	5.03	14.62	I	C	SP	P
ZUL	84.551	324.28	5.03	14.62	E	C	LP	P
EMS	84.569	322.54	5.03	14.62	E	C	LP	P
SLE	84.659	324.55	5.03	14.62	E	C	LP	P
MOX	84.749	328.10	5.03	14.62	I	C	LP	P
MDJ	84.838	39.39	4.99	14.50	I	C	SP	P
SSB	85.536	320.95	4.96	14.41	I	C	SP	P
BSF	85.638	323.95	4.96	14.41	I	C	SP	P
CDF	85.699	324.61	4.96	14.41	I	C	SP	P
GWF	85.833	325.21	4.91	14.26	I	C	SP	P
HAU	85.983	323.92	4.91	14.26	I	C	SP	P
PLDF	86.450	321.19	4.87	14.14	I	C	SP	P
MAJO	86.589	49.66	4.87	14.14	E	C	LP	P
MAT	86.589	49.66	4.87	14.14	I	C	SP	P
SMF	86.676	321.85	4.87	14.14	I	C	SP	P
PYM	86.701	320.78	4.87	14.14	I	C	SP	P
LBF	86.777	322.19	4.83	14.02	I	C	SP	P
CAF	86.849	319.73	4.83	14.02	I	C	SP	P
CRT	86.943	310.89	4.83	14.02	I	C	SP	P
EPF	86.985	317.47	4.83	14.02	I	C	SP	P
LOR	86.996	322.39	4.83	14.02	I	C	SP	P
AVF	87.039	321.80	4.83	14.02	I	C	SP	P
SSF	87.091	322.08	4.83	14.02	I	C	SP	P
LPO	87.266	319.21	4.80	13.93	I	C	SP	P
MAL	87.325	310.19	4.80	13.93	I	C	SP	P
RJF	87.375	319.86	4.80	13.93	I	C	SP	P
TCF	87.454	320.96	4.80	13.93	I	C	SP	P
GRC	87.465	322.13	4.80	13.93	I	C	SP	P
COP	87.519	332.36	4.80	13.93	I	C	SP	P
LFF	87.670	319.27	4.80	13.93	I	C	SP	P
LSF	87.842	320.69	4.78	13.88	I	C	SP	P
DOU	88.095	325.04	4.78	13.88	I	C	LP	P
TOL	88.448	313.15	4.75	13.79	I	C	SP	P
TOL	88.448	313.15	4.75	13.79	I	C	LP	P
LGR	88.561	315.97	4.75	13.79	I	C	SP	P
UCC	88.600	325.55	4.75	13.79	I	C	SP	P
GUD	88.855	313.79	4.73	13.73	I	C	SP	P

Table 137. Station data for event 89 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
MFF	89.024	320.42	4.73	13.73	I	C	SP	P
LDF	89.975	322.17	4.71	13.67	I	C	SP	P
SNZO	90.077	134.02	4.71	13.67	E	C	LP	P
LPF	90.244	321.38	4.71	13.67	I	C	SP	P
FLN	90.266	322.20	4.70	13.64	I	C	SP	P
GRR	90.306	321.76	4.70	13.64	I	C	SP	P
NOU	90.993	113.86	4.70	13.64	I	C	SP	P
EKA	94.780	327.28	4.58	13.28	I	C	SP	P
LPA	105.450	224.11	1.89	5.44	E	N	LP	Pdf
GDH	118.272	339.68	1.88	5.40	E	C	LP	PKP
COL	128.397	18.26	1.86	5.35	E	C	LP	PKP
LHC	144.970	332.57	1.68	4.85	I	C	SP	PKP
EDM	145.719	0.75	1.66	4.79	I	C	SP	PKP
BLA	146.423	309.66	1.66	4.79	E	C	LP	PKP
SHA	154.893	302.64	1.39	3.99	E	C	LP	PKP

Table 138. Station data for event 156.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
NAI	10.347	333.37	13.67	43.30	I	D	SP P
NAI	10.347	333.37	13.67	43.30	E	C	LP P
BUL	15.558	230.96	12.90	40.33	E	C	LP P
BUL	15.558	230.96	12.90	40.33	I	C	SP P
ARO	22.035	3.72	9.97	30.01	I	D	SP P
VIR	22.110	216.17	9.97	30.01	I	C	SP P
BLF	23.274	215.59	9.70	29.12	I	C	SP P
BNG	27.242	302.14	9.29	27.78	I	C	SP P
SHI	41.420	14.68	8.19	24.26	I	D	SP P
JER	42.554	352.15	8.13	24.07	I	C	SP P
RTB	43.401	358.64	8.08	23.91	I	C	SP P
MSL	46.760	1.91	7.88	23.29	I	D	SP P
IR2	46.878	10.58	7.88	23.29	I	D	SP P
QUE	47.415	30.45	7.85	23.19	I	D	LP P
ELL	48.328	347.60	7.79	23.01	I	D	SP P
YER	49.063	346.08	7.75	22.88	I	D	SP P
MHI	49.664	19.19	7.71	22.76	I	D	LP P
ANTO	50.849	351.44	7.59	22.38	E	D	LP P
ATH	51.085	342.00	7.59	22.38	I	D	SP P
DST	51.347	347.34	7.55	22.26	I	D	SP P
YLV	52.118	348.37	7.50	22.10	I	D	SP P
NDI	52.166	40.59	7.50	22.10	I	D	SP P
KGT	52.452	346.42	7.46	21.98	I	C	SP P
ISK	52.661	348.25	7.46	21.98	I	C	SP P
MFT	52.776	346.53	7.42	21.86	I	D	SP P
THE	53.761	342.62	7.34	21.61	I	D	SP P
KDZ	54.050	345.15	7.34	21.61	I	D	SP P
VAY	54.511	342.61	7.30	21.48	I	D	SP P
SKO	55.446	341.97	7.22	21.24	I	D	SP P
VTS	55.513	343.73	7.22	21.24	I	D	SP P
PVL	55.512	345.61	7.22	21.24	I	D	SP P
BUC1	56.445	346.79	7.15	21.02	I	D	SP P
BUC	56.494	346.87	7.15	21.02	I	D	SP P
CFR	56.807	348.81	7.11	20.90	I	D	SP P
MLR	57.552	347.14	7.08	20.81	I	C	SP P
VR1	57.747	347.90	7.08	20.81	I	D	SP P
CLO	57.916	344.51	7.04	20.68	I	D	SP P
BUD	61.171	342.84	6.81	19.98	I	D	SP P
TRI	61.331	338.24	6.77	19.86	I	D	SP P
SOP	62.098	341.24	6.73	19.73	I	D	SP P
ZST	62.383	341.88	6.69	19.61	I	D	SP P
SPC	62.387	344.48	6.69	19.61	I	D	SP P
KBA	62.652	338.76	6.69	19.61	I	D	SP P
VKA	62.687	341.39	6.69	19.61	I	D	SP P
KRA	63.262	344.67	6.60	19.34	I	D	SP P
OGA	63.331	337.14	6.60	19.34	I	D	SP P
BHG	63.366	338.84	6.60	19.34	I	D	SP P
CHTO	63.803	62.94	6.56	19.22	E	D	LP P
MAL	63.802	320.03	6.56	19.22	I	D	LP P
FUR	64.319	338.09	6.52	19.09	I	D	SP P

Table 138. Station data for event 156 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
KHC	64.332	340.10	6.52	19.09	I	D	SP	P
WET	64.580	339.67	6.52	19.09	I	D	SP	P
SFS	64.788	318.83	6.48	18.97	I	D	SP	P
KSP	64.980	342.71	6.48	18.97	I	D	SP	P
TOL	65.559	322.94	6.44	18.85	I	D	SP	P
STU	65.600	337.20	6.44	18.85	I	D	SP	P
STU	65.600	337.20	6.44	18.85	E	D	LP	P
GRF	65.619	338.98	6.44	18.85	I	D	SP	P
SNA	65.621	194.91	6.44	18.85	I	D	SP	P
BRG	65.720	341.29	6.44	18.85	I	D	SP	P
BUH	65.894	336.57	6.40	18.73	I	D	SP	P
MOX	66.288	339.78	6.36	18.61	I	D	SP	P
GWF	66.375	336.42	6.36	18.61	I	D	SP	P
CLL	66.397	340.97	6.36	18.61	I	D	SP	P
GRC	66.990	332.69	6.31	18.46	I	D	SP	P
ENN	68.467	336.64	6.19	18.09	I	D	SP	P
DOU	68.472	335.48	6.19	18.09	E	D	LP	P
WTS	69.109	337.92	6.15	17.97	I	D	SP	P
COP	70.344	343.05	6.04	17.64	E	D	LP	P
COP	70.344	343.05	6.04	17.64	I	D	SP	P
MRWA	71.492	117.29	5.96	17.40	I	D	SP	P
MUN	71.599	120.20	5.96	17.40	I	D	SP	P
MUN	71.599	120.20	5.96	17.40	E	D	LP	P
MUD	71.973	341.85	5.93	17.31	I	D	SP	P
BAL	72.063	118.77	5.93	17.31	I	C	SP	P
HFS	73.903	345.97	5.79	16.89	I	D	SP	P
KONO	74.531	343.87	5.75	16.77	I	D	SP	P
ECP	74.773	331.79	5.72	16.68	I	D	SP	P
ETA	75.039	332.26	5.72	16.68	I	D	SP	P
ECB	75.087	331.76	5.72	16.68	I	D	SP	P
BER	76.358	342.47	5.62	16.38	I	D	SP	P
VAL	76.473	330.03	5.62	16.38	I	D	LP	P
SPA	79.461	180.00	5.42	15.78	I	D	SP	P
TATO	85.575	63.72	4.96	14.41	E	D	LP	P
ANP	85.649	63.53	4.96	14.41	E	D	LP	P
BDF	86.549	254.80	4.87	14.14	I	D	LP	P
SSE	86.796	57.73	4.83	14.02	E	D	LP	P
ASPA	88.051	113.57	4.78	13.88	I	D	SP	P
ADE	89.889	125.44	4.71	13.67	E	D	LP	P
KBS	90.794	354.53	4.70	13.64	E	D	LP	P
SEO	92.884	52.49	4.65	13.49	E	D	LP	P
DAG	93.750	348.44	4.63	13.43	I	C	SP	P
PEL	102.177	232.68	4.45	12.90	I	D	LP	Pdf
WES	113.858	311.65	1.88	5.42	I	C	LP	PKP
BOG	115.871	270.02	1.88	5.41	E	D	LP	PKP
BLA	121.619	307.20	1.87	5.39	E	N	LP	PKP
UPA	121.868	274.02	1.87	5.39	E	D	LP	PKP
SHA	129.223	300.99	1.86	5.34	E	D	LP	PKP
GOL	138.680	320.21	1.78	5.13	E	C	LP	PKP
MIN	146.790	335.96	1.64	4.72	I	D	SP	PKP

Table 138. Station data for event 156 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
MNA	146.810	329.96	1.64	4.72	I	D	SP	PKP
WDC	146.953	337.30	1.64	4.72	I	D	SP	PKP
ORV	147.416	335.06	1.64	4.72	I	D	SP	PKP
JAS1	148.291	332.04	1.62	4.65	I	D	SP	PKP
BKS	149.139	334.27	1.59	4.57	I	D	SP	PKP
BKS	149.139	334.27	1.59	4.57	E	D	LP	PKP
MHC	149.325	332.93	1.59	4.57	I	D	SP	PKP
PRI	149.843	330.29	1.56	4.49	I	D	SP	PKP
PRS	150.027	331.43	1.56	4.49	I	D	SP	PKP

Table 139. Station data for event 157.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
NAI	10.241	333.05	13.73	43.54	I	D	SP	P
MTD	11.427	235.76	13.54	42.79	I	C	SP	P
KRI	13.092	239.94	13.32	41.93	I	C	SP	P
BUL	15.637	230.63	12.90	40.33	E	C	LP	P
BUL	15.637	230.63	12.90	40.33	I	C	SP	P
JOZ	19.025	206.29	12.21	37.78	I	C	SP	P
SLR	19.620	217.65	12.10	37.38	I	C	LP	P
BFS	21.381	218.26	10.08	30.38	I	C	SP	P
ARO	21.914	3.73	9.97	30.01	I	D	SP	P
VIR	22.211	216.00	9.97	30.01	I	C	SP	P
BNG	27.181	301.94	9.29	27.78	I	D	SP	P
HLW	41.266	346.66	8.19	24.26	I	D	SP	P
JER	42.434	352.13	8.13	24.07	I	D	SP	P
RTB	43.280	358.63	8.08	23.91	I	C	SP	P
BHD	43.602	3.60	8.08	23.91	I	C	SP	P
MSL	46.639	1.91	7.91	23.38	I	C	SP	P
IR2	46.758	10.60	7.88	23.29	I	D	SP	P
QUE	47.309	30.50	7.85	23.19	I	D	LP	P
ELL	48.211	347.58	7.82	23.10	I	D	SP	P
TAB	48.510	5.16	7.79	23.01	I	D	SP	P
BCK	48.760	348.52	7.75	22.88	I	C	SP	P
KIC	48.921	287.98	7.75	22.88	I	D	SP	P
YER	48.946	346.05	7.75	22.88	I	D	SP	P
MHI	49.548	19.22	7.71	22.76	I	D	LP	P
ANTO	50.729	351.42	7.63	22.51	E	D	LP	P
ATH	50.971	341.97	7.59	22.38	I	D	SP	P
DST	51.230	347.32	7.59	22.38	I	D	SP	P
KCT	51.905	347.29	7.50	22.10	I	D	SP	P
EZN	51.977	345.24	7.50	22.10	I	C	SP	P
YLV	52.000	348.35	7.50	22.10	I	D	SP	P
EDC	52.108	346.87	7.50	22.10	I	D	SP	P
KGT	52.335	346.39	7.46	21.98	I	D	SP	P
ISK	52.544	348.23	7.46	21.98	I	D	SP	P
CTT	52.751	347.68	7.42	21.86	I	D	SP	P
DMK	53.541	347.31	7.38	21.73	I	D	SP	P
THE	53.646	342.59	7.38	21.73	I	D	SP	P
KDZ	53.934	345.12	7.34	21.61	I	D	SP	P
VAY	54.396	342.58	7.30	21.48	I	D	SP	P
OHR	54.750	340.97	7.26	21.36	I	D	SP	P
LCI	55.033	338.19	7.26	21.36	I	D	SP	P
SKO	55.331	341.94	7.22	21.24	I	D	SP	P
VTS	55.398	343.70	7.22	21.24	I	D	SP	P
PVL	55.395	345.59	7.22	21.24	I	D	SP	P
BRT	55.785	337.90	7.19	21.14	I	D	SP	P
DMN	56.778	47.11	7.11	20.90	I	D	SP	P
PKI	56.974	47.33	7.11	20.90	I	D	SP	P
KKN	57.008	47.04	7.11	20.90	I	D	SP	P
CMP	57.428	346.32	7.08	20.81	I	D	SP	P
MLR	57.435	347.12	7.08	20.81	I	D	SP	P
VRI	57.629	347.88	7.08	20.81	I	D	SP	P

Table 139. Station data for event 157 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
COZ	57.642	345.79	7.08	20.81	I	D	SP	P
CVO	57.700	347.43	7.08	20.81	I	D	SP	P
CLO	57.800	344.49	7.04	20.68	I	D	SP	P
AQU	58.517	335.89	7.00	20.56	I	D	SP	P
BUD	61.057	342.82	6.81	19.98	I	D	SP	P
PSZ	61.205	343.64	6.81	19.98	I	D	SP	P
TR1	61.220	338.21	6.81	19.98	I	D	SP	P
SNG	61.483	75.91	6.77	19.86	I	C	LP	P
JOS	61.558	344.35	6.77	19.86	I	D	SP	P
SRO	61.562	342.49	6.77	19.86	I	D	SP	P
SOP	61.984	341.22	6.73	19.73	I	D	SP	P
ZST	62.269	341.86	6.69	19.61	I	D	SP	P
SPC	62.271	344.46	6.69	19.61	I	D	SP	P
CTI	62.298	337.00	6.69	19.61	I	D	SP	P
ALI	62.373	323.64	6.69	19.61	I	C	LP	P
KBA	62.541	338.74	6.69	19.61	I	D	SP	P
ALM	62.572	321.21	6.69	19.61	I	C	SP	P
VKA	62.574	341.37	6.69	19.61	I	D	SP	P
KMR	63.106	339.82	6.64	19.46	I	D	LP	P
KRA	63.146	344.65	6.64	19.46	I	D	SP	P
OGA	63.221	337.11	6.64	19.46	I	D	SP	P
BHG	63.254	338.82	6.60	19.34	I	D	SP	P
MAL	63.712	319.99	6.60	19.34	I	D	LP	P
GAP	63.712	337.51	6.60	19.34	I	D	SP	P
CHTO	63.744	63.00	6.60	19.34	E	N	LP	P
FUR	64.208	338.07	6.56	19.22	I	D	SP	P
KHC	64.219	340.07	6.56	19.22	I	D	SP	P
WET	64.468	339.65	6.52	19.09	I	D	SP	P
PRU	64.647	341.15	6.52	19.09	I	D	SP	P
MLS	64.685	328.28	6.52	19.09	I	D	SP	P
SFS	64.700	318.79	6.52	19.09	I	D	SP	P
KSP	64.865	342.69	6.48	18.97	I	D	SP	P
TOL	65.465	322.91	6.44	18.85	E	C	LP	P
TOL	65.465	322.91	6.44	18.85	I	D	SP	P
STU	65.489	337.18	6.44	18.85	I	D	LP	P
GRF	65.508	338.96	6.44	18.85	I	D	SP	P
BRG	65.607	341.27	6.44	18.85	I	D	SP	P
PLDF	65.641	332.01	6.44	18.85	I	D	SP	P
SNA	65.739	194.90	6.44	18.85	I	D	SP	P
PYM	65.763	331.50	6.40	18.73	I	D	SP	P
BUH	65.785	336.55	6.40	18.73	I	D	SP	P
MOX	66.176	339.76	6.40	18.73	I	D	SP	P
LGR	66.258	325.88	6.36	18.61	I	D	SP	P
GWF	66.266	336.39	6.36	18.61	I	D	SP	P
CLL	66.284	340.95	6.36	18.61	I	D	SP	P
GRC	66.885	332.66	6.31	18.46	I	D	SP	P
TNS	66.956	337.67	6.31	18.46	I	D	SP	P
BRN	67.177	341.68	6.31	18.46	I	D	SP	P
LIS	67.912	319.29	6.23	18.21	I	D	SP	P
BNS	68.033	337.43	6.23	18.21	I	D	SP	P

Table 139. Station data for event 157 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
ENN	68.357	336.62	6.19	18.09	I	D	SP P
DOU	68.363	335.46	6.19	18.09	E	D	LP P
WTS	68.998	337.90	6.15	17.97	I	D	SP P
UCC	69.002	335.81	6.15	17.97	E	C	LP P
HAM	69.114	340.46	6.15	17.97	I	D	SP P
KMI	69.412	58.16	6.11	17.85	I	D	SP P
DBN	69.697	337.11	6.11	17.85	I	D	LP P
COP	70.229	343.04	6.07	17.73	I	D	SP P
COP	70.229	343.04	6.07	17.73	I	D	LP P
MUN	71.657	120.23	5.96	17.40	E	N	LP P
MUN	71.657	120.23	5.96	17.40	I	D	SP P
MUD	71.859	341.83	5.93	17.31	I	D	SP P
UPP	72.656	347.68	5.89	17.19	I	D	SP P
KLB	72.988	119.87	5.86	17.10	I	D	SP P
HFS	73.786	345.96	5.79	16.89	I	D	SP P
ECP	74.668	331.77	5.75	16.77	I	D	SP P
ECP	74.668	331.77	5.75	16.77	I	D	SP P
ETA	74.934	332.24	5.72	16.68	I	D	SP P
ETA	74.934	332.24	5.72	16.68	I	D	SP P
ECB	74.982	331.74	5.72	16.68	I	D	SP P
ECB	74.982	331.74	5.72	16.68	I	D	SP P
KMY	75.323	341.70	5.68	16.56	I	C	LP P
DLE	75.476	332.56	5.68	16.56	I	D	SP P
MBL	75.560	109.23	5.68	16.56	I	C	SP P
DCN	75.846	332.31	5.65	16.47	I	D	SP P
BER	76.244	342.46	5.65	16.47	I	D	SP P
VAL	76.370	330.02	5.62	16.38	I	D	LP P
MKS	77.334	93.03	5.56	16.20	I	D	SP P
SPA	79.583	180.00	5.42	15.78	I	D	SP P
SOB1	80.881	262.29	5.27	15.33	I	D	SP P
WBN	81.144	114.97	5.27	15.33	I	D	SP P
BAG	82.710	71.86	5.15	14.97	E	D	LP P
KNA	84.680	104.97	5.03	14.62	I	D	SP P
TATO	85.518	63.73	4.96	14.41	E	N	LP P
ANP	85.592	63.53	4.96	14.41	I	D	LP P
BAO	86.673	254.81	4.87	14.14	I	D	SP P
SSE	86.728	57.74	4.87	14.14	E	D	LP P
SBA	86.777	170.03	4.83	14.02	I	D	SP P
ASPA	88.096	113.57	4.78	13.88	I	D	SP P
WB2	89.193	110.01	4.73	13.73	I	D	SP P
ADE	89.957	125.44	4.71	13.67	E	D	LP P
KBS	90.674	354.53	4.70	13.64	E	D	LP P
LPA	91.631	234.22	4.69	13.61	I	D	LP P
SEO	92.808	52.49	4.65	13.49	E	D	LP P
STK	93.017	123.01	4.65	13.49	I	C	SP P
GDH	101.493	338.75	4.45	12.90	E	D	LP Pdf
PEL	102.254	232.70	4.45	12.90	I	D	LP Pdf
SJG	109.776	285.53	1.89	5.44	E	D	LP PKP
WES	113.780	311.69	1.88	5.42	I	C	LP PKP
BOG	115.875	270.07	1.88	5.41	E	D	LP PKP

Table 139. Station data for event 157 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
BRW	118.200	6.56	1.88	5.40	I	C	SP	PKP
BLA	121.549	307.26	1.87	5.39	E	N	LP	PKP
UPA	121.863	274.09	1.87	5.39	E	D	LP	PKP
COL	125.288	4.80	1.87	5.37	E	D	LP	PKP
COL	125.288	4.80	1.87	5.37	I	D	SP	PKP
FFC	127.257	334.24	1.86	5.36	I	D	SP	PKP
SHA	129.164	301.08	1.86	5.34	E	D	LP	PKP
YKM	137.249	337.79	1.80	5.19	I	C	SP	PKP
LDM	137.436	337.13	1.80	5.19	I	C	SP	PKP
LHD	137.689	337.16	1.79	5.16	I	C	SP	PKP
GOL	138.589	320.30	1.78	5.13	E	C	LP	PKP
BKS	149.031	334.37	1.59	4.57	I	C	SP	PKP

Table 140. Station data for event 159.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion		
MUN	33.153	104.79	8.69	25.85	I	C	SP P
MUN	33.153	104.79	8.69	25.85	I	C	LP P
MRWA	33.319	99.77	8.66	25.75	I	C	SP P
MEK	36.046	96.08	8.51	25.27	I	C	SP P
MBL	38.764	88.10	8.33	24.70	I	C	SP P
TRT	39.113	64.01	8.33	24.70	I	D	SP P
MAW	39.572	188.88	8.30	24.61	I	D	SP P
SNG	42.248	35.02	8.16	24.17	I	D	LP P
TET	42.511	277.78	8.13	24.07	I	D	SP P
EVA	42.884	261.35	8.11	24.01	I	D	SP P
WBN	43.140	98.20	8.11	24.01	I	C	SP P
SLR	43.778	262.15	8.05	23.82	I	D	LP P
BPI	43.877	261.45	8.05	23.82	I	D	SP P
MTD	43.977	275.76	8.05	23.82	I	D	SP P
BLF	44.737	256.82	8.03	23.76	I	D	SP P
BFS	44.762	260.04	8.00	23.66	I	D	SP P
BUL	45.270	269.81	7.97	23.57	I	D	LP P
BUL	45.270	269.81	7.97	23.57	I	D	SP P
KRI	45.673	274.59	7.97	23.57	I	D	SP P
MKS	46.035	67.08	7.94	23.48	I	C	SP P
HYB	46.224	1.08	7.94	23.48	I	D	SP P
LSZ	47.568	275.72	7.85	23.19	I	C	SP P
NAI	47.791	297.84	7.82	23.10	I	D	LP P
NST	49.470	28.88	7.71	22.76	I	D	SP P
ASPA	50.220	97.67	7.67	22.63	E	C	LP P
ADE	51.344	113.12	7.55	22.26	I	D	SP P
ADE	51.344	113.12	7.55	22.26	I	D	LP P
CHTO	51.826	25.84	7.50	22.10	I	D	LP P
MTN	51.985	83.60	7.50	22.10	I	C	SP P
ARO	52.574	315.10	7.46	21.98	I	D	SP P
STK	54.393	110.05	7.30	21.48	I	C	SP P
DAV	58.408	59.73	7.00	20.56	E	D	LP P
CGP	58.639	57.86	7.00	20.56	I	D	SP P
KMI	59.000	26.55	6.97	20.47	I	D	LP P
WAM	59.134	116.89	6.97	20.47	I	D	SP P
YOU	59.253	114.62	6.93	20.35	I	D	SP P
QUE	59.821	349.20	6.89	20.22	I	D	LP P
SPA	61.087	180.00	6.81	19.98	I	D	SP P
BAG	61.297	48.08	6.77	19.86	I	D	LP P
SBA	61.597	166.07	6.77	19.86	I	D	SP P
CTAO	62.203	98.61	6.73	19.73	E	N	LP P
CTA	62.203	98.61	6.73	19.73	I	D	SP P
BCAO	65.809	290.14	6.40	18.73	I	D	LP P
PMG	67.533	88.42	6.27	18.33	I	D	SP P
TATO	68.230	42.52	6.23	18.21	I	D	LP P
ANP	68.404	42.40	6.19	18.09	I	D	LP P
IR2	69.177	336.84	6.15	17.97	I	D	SP P
LZH	69.315	22.40	6.11	17.85	I	D	SP P
SSE	72.740	38.16	5.89	17.19	I	D	LP P
JER	72.778	322.92	5.86	17.10	I	D	SP P

Table 140. Station data for event 159 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SNZO	76.238	129.65	5.65	16.47	E	N	LP	P
GUMO	77.412	66.64	5.56	16.20	I	D	LP	P
GUA	77.421	66.70	5.56	16.20	E	D	LP	P
BJI	77.489	29.27	5.56	16.20	E	D	LP	P
BCK	79.572	323.62	5.42	15.78	I	C	SP	P
ANTO	80.315	326.53	5.31	15.45	I	D	LP	P
YER	80.549	322.00	5.31	15.45	I	D	SP	P
SEO	80.750	37.57	5.31	15.45	I	D	LP	P
DST	82.196	323.88	5.18	15.06	I	D	SP	P
YLV	82.534	324.95	5.15	14.97	I	D	SP	P
EDC	83.139	323.94	5.12	14.88	I	D	SP	P
PRK	83.171	322.28	5.12	14.88	I	D	SP	P
CTT	83.443	324.80	5.09	14.80	I	D	SP	P
DMK	84.282	324.88	5.03	14.62	I	D	SP	P
JMB	85.348	324.68	4.96	14.41	I	C	SP	P
KDZ	85.384	323.44	4.96	14.41	I	D	SP	P
PSN	85.450	326.37	4.96	14.41	I	C	SP	P
DIM	85.554	323.84	4.96	14.41	I	C	SP	P
THE	85.943	321.44	4.91	14.26	I	D	SP	P
MMB	86.202	322.53	4.91	14.26	I	D	SP	P
MAJO	86.511	44.60	4.87	14.14	I	D	LP	P
MAT	86.511	44.60	4.87	14.14	I	D	LP	P
PVL	86.557	324.39	4.87	14.14	I	C	SP	P
VAY	86.637	321.73	4.87	14.14	I	D	SP	P
BUC1	86.992	325.67	4.83	14.02	I	D	SP	P
VTS	87.191	322.98	4.83	14.02	I	D	SP	P
ISR	87.316	326.48	4.80	13.93	I	D	SP	P
OHR	87.465	320.66	4.80	13.93	I	D	SP	P
SKO	87.699	321.62	4.80	13.93	I	D	SP	P
MLR	87.865	326.42	4.78	13.88	I	D	SP	P
TTG	89.202	320.86	4.73	13.73	I	D	SP	P
DUI	91.442	317.97	4.69	13.61	I	D	SP	P
AQU	92.488	318.03	4.66	13.52	I	D	SP	P
JOS	92.608	325.96	4.66	13.52	I	D	SP	P
BUD	92.686	324.53	4.66	13.52	I	D	SP	P
MNS	92.933	317.73	4.65	13.49	I	D	SP	P
SPC	93.220	326.34	4.65	13.49	I	D	SP	P
SOP	94.083	323.59	4.62	13.40	I	D	SP	P
TRI	94.343	320.84	4.60	13.34	I	D	SP	P
VKA	94.578	323.94	4.60	13.34	I	D	SP	P
KBA	95.411	321.75	4.56	13.23	I	C	SP	P
BHG	96.053	322.07	4.55	13.20	I	D	SP	P
BRG	97.415	325.02	4.52	13.11	I	D	SP	P
GRF	98.108	323.01	4.51	13.08	I	D	SP	P
GRFO	98.112	323.01	4.51	13.08	I	D	LP	P
CLL	98.152	325.01	4.51	13.08	I	D	SP	P
STU	98.664	321.47	4.50	13.05	E	D	LP	P
GW	99.641	321.06	4.47	12.96	I	C	SP	P
COP	101.027	328.38	4.45	12.90	E	D	LP	Pdf
LPA	103.841	216.27	4.45	12.90	E	D	LP	Pdf

Table 140. Station data for event 159 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
VAL	111.135	318.44	1.89	5.44	E	D	LP	PKP
KBS	113.887	348.87	1.88	5.42	I	C	LP	PKP
GDH	131.111	339.17	1.85	5.32	E	C	LP	PKP
COL	134.338	25.19	1.83	5.26	I	D	LP	PKP
SDV	144.161	242.27	1.70	4.90	I	C	SP	PKP
SJG	145.277	259.78	1.68	4.85	I	C	SP	PKP
SJG	145.277	259.78	1.68	4.85	I	D	LP	PKP
UPA	150.759	231.39	1.53	4.40	I	D	LP	PKP
WES	151.760	306.37	1.50	4.31	I	D	LP	PKP
COR	157.228	41.51	1.31	3.76	I	C	SP	PKP
BLA	160.022	299.60	1.17	3.36	E	D	LP	PKP
BKS	161.200	57.00	1.12	3.22	E	D	LP	PKP
JAS1	162.498	55.02	1.07	3.07	I	D	SP	PKP
PR1	162.986	60.84	1.02	2.92	I	D	SP	PKP
SHA	167.639	280.94	0.74	2.13	I	D	LP	PKP
GOL	169.102	12.78	0.68	1.96	I	D	LP	PKP
TPM	169.532	196.92	0.62	1.79	I	D	SP	PKP
TUL	171.271	322.91	0.56	1.62	E	D	LP	PKP

Table 141. Station data for event 224.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
SLR	24.207	285.68	9.62	28.86	I	C	SP	P
BFS	24.865	281.71	9.49	28.43	I	C	SP	P
BUL	27.071	296.76	9.29	27.78	I	C	SP	P
BUL	27.071	296.76	9.29	27.78	I	C	LP	P
MTD	27.263	306.34	9.25	27.65	I	C	SP	P
KRI	28.552	303.40	9.14	27.29	I	C	SP	P
NAI	37.404	330.45	8.42	24.99	I	C	LP	P
LW1	40.379	318.51	8.24	24.42	I	C	SP	P
GBR	47.369	344.20	7.85	23.19	I	C	LP	P
ATA	47.504	345.26	7.85	23.19	I	C	LP	P
SGH	47.607	344.52	7.85	23.19	I	C	LP	P
ARO	47.649	344.82	7.85	23.19	I	C	LP	P
DAF	47.795	344.43	7.82	23.10	E	C	LP	P
OBO	48.001	345.52	7.82	23.10	I	C	LP	P
MUN	51.004	105.14	7.59	22.38	E	C	LP	P
NWAQ	51.470	106.68	7.55	22.26	I	C	LP	P
NWAQ	51.470	106.68	7.55	22.26	I	C	SP	P
BNG	51.709	312.17	7.55	22.26	I	C	SP	P
BCAO	51.715	312.16	7.55	22.26	I	C	LP	P
SPA	55.041	180.00	7.26	21.36	I	C	SP	P
POO	56.531	22.44	7.15	21.02	I	D	SP	P
SNG	60.664	55.49	6.85	20.10	E	D	LP	P
WBN	61.671	103.32	6.77	19.86	I	C	SP	P
ADE	66.939	117.31	6.31	18.46	I	C	SP	P
NDI	67.081	21.87	6.31	18.46	I	D	SP	P
CHTO	68.401	45.78	6.19	18.09	E	D	LP	P
CHG	68.401	45.78	6.19	18.09	I	D	SP	P
BFD	68.650	120.99	6.19	18.09	I	C	SP	P
BHD	68.676	351.15	6.19	18.09	I	D	SP	P
ASPA	68.684	104.47	6.19	18.09	I	C	SP	P
DMN	68.888	29.21	6.15	17.97	I	D	SP	P
PKI	68.976	29.49	6.15	17.97	I	D	SP	P
KKN	69.119	29.27	6.15	17.97	I	D	SP	P
WRA	70.926	101.30	6.00	17.52	I	C	SP	P
CAN	74.090	122.07	5.79	16.89	I	C	SP	P
YOU	74.208	120.87	5.79	16.89	I	C	SP	P
ANTO	77.213	343.23	5.59	16.29	I	C	LP	P
IST	79.283	340.83	5.42	15.78	I	C	LP	P
CTA	80.299	107.64	5.31	15.45	I	C	LP	P
CTA	80.299	107.64	5.31	15.45	I	C	SP	P
VAY	81.455	336.43	5.22	15.18	I	C	SP	P
SKO	82.413	335.95	5.15	14.97	I	C	SP	P
VRI	84.375	341.07	5.03	14.62	I	C	SP	P
TATO	87.301	56.92	4.80	13.93	E	D	LP	P
PSZ	88.208	337.68	4.78	13.88	I	C	SP	P
VKA	89.669	335.75	4.72	13.70	I	C	SP	P
KBA	89.701	333.42	4.72	13.70	I	C	SP	P
CRT	89.793	317.46	4.71	13.67	I	D	SP	P
CDR	89.998	327.10	4.71	13.67	I	C	SP	P
FUR	91.378	332.84	4.69	13.61	I	C	SP	P

Table 141. Station data for event 224 ... continued.

Station	Distance (°)	Azimuth (°)	dt/dΔ (sec/°)	JB Focal Angle (°)	Quality, Direction, and Source of Earth Motion			
TOL	91.970	319.08	4.67	13.55	E	C	LP	P
STU	92.666	332.05	4.66	13.52	E	C	LP	P
GRFO	92.667	333.66	4.66	13.52	E	C	LP	P
NOU	94.053	120.74	4.62	13.40	I	C	SP	P
DZM	94.203	120.56	4.62	13.40	I	C	SP	P
HNR	97.219	106.78	4.53	13.14	E	D	LP	P
COP	97.248	337.63	4.53	13.14	E	C	LP	P
DAG	120.159	345.24	1.87	5.39	I	C	SP	PKP
BEC	129.844	285.27	1.85	5.33	E	C	LP	PKP
UPA	130.463	249.66	1.85	5.33	I	C	SP	PKP
BLA	143.604	286.84	1.70	4.90	E	C	LP	PKP
SHA	148.235	272.75	1.62	4.65	E	C	LP	PKP
JCT	157.716	265.28	1.26	3.63	E	C	LP	PKP